

June 7, 2010

Illinois EPA DWPC, Permit Section #15 1021 North Grand Avenue East P.O. Box 19276 Springfield, IL 62794-9276

SUBJECT: City of Naperville - Springbrook Water Reclamation Center

Request for Renewal of NPDES Permit #IL0034061

To Whom It May Concern:

We are submitting the completed application for the renewal of the Springbrook Water Reclamation Center's NPDES Permit #IL0034061. As per the instructions, one original and one copy of the applications 2A and 2S are being provided with original signatures.

For this permit renewal application, the City of Naperville is adding two new discharge locations. These locations are called South Operations Center, designed 002, and Water Service Center, designated 003. These facilities are major pump stations which collect and pump wastewater to the Springbrook Water Reclamation Center for treatment and discharge through our main discharge location, 001.

Both of these locations have wet weather storage lagoons which temporarily hold wastewater during high flow events until the collection system can regain capacity and pump the water to the treatment plant. Most of the time, these lagoons are dry and contain no wastewater. They are not designed for a controlled release of wastewater with valves or gates. There have been only three occasions where wastewater has flowed over the berm when the lagoons became full.

June 7, 2010 Illinois EPA Page Two

SUBJECT: City of Naperville - Springbrook Water Reclamation Center

Request for Renewal of NPDES Permit #IL0034061

If you have any questions or require any additional information, please do not hesitate to contact us at (630)420-6122.

Director of Public-Utilities Water/

Wastewater

Sincerely,

David A. Nykiel, P.E.

Operations Manager

Department of Public Utilities-Water/

Wastewater

Water Supply and Reclamation Division

DAN\JEH\kw adm\memos\permit-10

Enclosures

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NPDES Permit No. IL0034061

**FORM 2A NPDES** 

### NPDES FORM 2A APPLICATION OVERVIEW

**APPLICATION OVERVIEW** 

Form 2A has been developed in a modular format and consists of a "Basic Application Information" packet and a "Supplemental Application Information" packet. The Basic Application Information packet is divided into two parts. All applicants must complete Parts A and C. Applicants with a design flow greater than or equal to 0.1 mgd must also complete Part B. Some applicants must also complete the Supplemental Application Information packet. The following items explain which parts of Form 2A you must complete.

#### BASIC APPLICATION INFORMATION:

- Basic Application Information for all Applicants. All applicants must complete questions A.1 through A.8. A treatment works that discharges effluent to surface waters of the United States must also answer questions A.9 through A.12.
- Additional Application Information for Applicants with a Design Flow > 0.1 mgd. All treatment works that have design flows greater than or equal to 0.1 million gallons per day must complete questions B.1 through B.6.
- **Certification.** All applicants must complete Part C (Certification).

#### SUPPLEMENTAL APPLICATION INFORMATION:

- Expanded Effluent Testing Data. A treatment works that discharges effluent to surface waters of the United States and meets one or more of the following criteria must complete Part D (Expanded Effluent Testing Data):
  - 1. Has a design flow rate greater than or equal to 1 mgd,
  - 2. Is required to have a pretreatment program (or has one in place), or
  - 3. Is otherwise required by the permitting authority to provide the information.
- E. Toxicity Testing Data. A treatment works that meets one or more of the following criteria must complete Part E (Toxicity Testing Data):
  - 1. Has a design flow rate greater than or equal to 1 mgd,
  - 2. Is required to have a pretreatment program (or has one in place), or
  - Is otherwise required by the permitting authority to submit results of toxicity testing.
- F. Industrial User Discharges and RCRA/CERCLA Wastes. A treatment works that accepts process wastewater from any significant industrial users (SIUs) or receives RCRA or CERCLA wastes must complete Part F (Industrial User Discharges and RCRA/CERCLA Wastes). SIUs are defined as:
  - All industrial users subject to Categorical Pretreatment Standards under 40 Code of Federal Regulations (CFR) 403.6 and 40 CFR Chapter I, Subchapter N (see instructions); and
  - 2. Any other industrial user that:
    - a. Discharges an average of 25,000 gallons per day or more of process wastewater to the treatment works (with certain exclusions); or
    - b. Contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or
    - c. Is designated as an SIU by the control authority.
- Combined Sewer Systems. A treatment works that has a combined sewer system must complete Part G (Combined Sewer Systems).

### ALL APPLICANTS MUST COMPLETE PART C (CERTIFICATION)

Form Approved 1/14/99

OMB Number 2040-0086

#### NPDES Permit No. IL0034061 BASIC APPLICATION INFORMATION PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS: All treatment works must complete questions A.1 through A.8 of this Basic Application Information packet. A.1. Facility Information. Facility name Springbrook Water Reclamation Center 400 S. Eagle St., P.O. Box 3020 Mailing Address Naperville, Illinois 60566-7020 Contact person David A. Nykiel, P.E. Operations Manager Title Telephone number \_\_\_\_(630)420-6122 3712 Plainfield/Naperville Road Facility Address (not P.O. Box) Naperville, Illinois 60564-4170 A.2. Applicant Information. If the applicant is different from the above, provide the following: City of Naperville Applicant name Mailing Address 400 S. Eagle St., P.O. Box 3020 Naperville, Illinois 60566-7020 James E. Holzapfel, P.E. Contact person Director of Public Utilities-Water/Wastewater Title Telephone number (630)420-6131 Is the applicant the owner or operator (or both) of the treatment works? \_\_\_\_X operator Indicate whether correspondence regarding this permit should be directed to the facility or the applicant. X\_ applicant \_\_\_\_ facility A.3. Existing Environmental Permits. Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits). NPDES <u>IL0034061</u> **PSD** 2007-SC-5031 (Land Application UIC Other of Sewage Sludge) **RCRA** Other A.4. Collection System Information. Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.). Name **Population Served** Type of Collection System Ownership Naperville Naperville 145,000 Separate Municipa1 Warrenville 11,000 Separate' Municipal

Total population served \_\_\_

156,000

A =						
A.5.	Inc	ian Country.				
	a.	Is the treatment works located in Indi	an Country?			
		YesXNo			5	
	b.	Does the treatment works discharge to eventually flows through) Indian Court		t is either in Indian Coun	try or that is upstream	from (and
		YesX No				
	pro	w. Indicate the design flow rate of the vide the average daily flow rate and mage 12-month time period with the 12th mo	aximum daily flow rate	for each of the last three	years. Each year's da	ita must be bas
	a.	Design flow rate26.25 m	gd			
			Two Years Ago	Last Year	This Year	
1	b.	Annual average daily flow rate	21.62	24.47		mgd
	c.	Maximum daily flow rate	47.20	65.66		mgd
_		to the Control of the transfer of	f 11 11 1 1- 1-		mt. Oback all that are	
		lection System. Indicate the type(s) o percent contribution (by miles) of each		ised by the treatment pla		ly. Also estimate
-		Separate sanitary sewer			100	%
_		Combined storm and sanitary sev	/er	9.		%
2 I	)ie	charges and Other Disposal Method	e	6		
	J131	and other bioposal method	<b>.</b>		9	
ε	<b>a</b> .	Does the treatment works discharge e	ffluent to waters of the	U.S.?	X Yes	No
		If yes, list how many of each of the fol	lowing types of discha	rge points the treatment	works uses:	
		i. Discharges of treated effluent			3	1
		ii. Discharges of untreated or partial	ly treated effluent	12	· .	0
	12	iii. Combined sewer overflow points				_0
		iv. Constructed emergency overflows	(prior to the headwork	(s)		2
		v. Other				0
b		Does the treatment works discharge eimpoundments that do not have outlet If yes, provide the following for each signs and the second sec	s for discharge to wate urface impoundment:	rs of the U.S.?	Yes _	X No
		Location:				
		Annual average daily volume discharg				ngd
		Is discharge continuous or	intermittent?			
C.	. 1	Does the treatment works land-apply to	reated wastewater?	2	Yes _	X No
	4	If yes, provide the following <u>for each la</u>	nd application site:			
	١,	Location:				
	ı	Number of acres:				
	,	Annual average daily volume applied to	site:	Mgd		
		s land application continuous				
					2	
d.		Does the treatment works discharge or another treatment works?	transport treated or un	ntreated wastewater to	Yes _	X No
	ć	monter acament works!				110

Form Approved 1/14/99 OMB Number 2040-0086

# Springbrook Water Reclamation Center NPDES Permit No. IL0034061

If transport is by a pa	rty other than the applicant, provide:
Transporter name:	
Mailing Address:	
OK.	9
Contact person:	
Title:	
Telephone number:	
Name: Mailing Address:	
Ø.	
Mailing Address:  Contact person:  Title:	
Mailing Address:  Contact person:	
Mailing Address:  Contact person:  Title:  Telephone number:  If known, provide the	NPDES permit number of the treatment works that receives this discharge.
Mailing Address:  Contact person:  Title:  Telephone number:  If known, provide the	
Mailing Address:  Contact person: Title: Telephone number: If known, provide the Provide the average of	NPDES permit number of the treatment works that receives this discharge.
Mailing Address:  Contact person: Title: Telephone number: If known, provide the Provide the average of Does the treatment win A.8.a through A.8.a	NPDES permit number of the treatment works that receives this discharge.  aily flow rate from the treatment works into the receiving facility.

FACILITY NAME AND PERMIT NUMBER: Springbrook Water Reclamation Center NPDES Permit No. IL0034061

Form Approved 1/14/99 OMB Number 2040-0086

#### WASTEWATER DISCHARGES:

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 once for each outfall (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. If you answered "no" to question A.8.a, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

A.9.	Description of Outf	fall.	
	a. Outfall number	001	
	b. Location	Naperville (City or town, if applicable)	60564-4170 (Zip Code)
		Will	Illinois
		(County)	(State)
		41 deg. 42 min	
	c. Distance from sho	(Latitude) pre (if applicable)	(Longitude) N/A ft.
	d. Depth below surface	ce (if applicable)	ft.
	e. Average daily flow	rate	
	f. Does this outfall ha periodic discharge	ave either an intermittent or a	YesX No (go to A.9.g.)
	If yes, provide the	following information:	
	Number of times p	er year discharge occurs:	
	Average duration o	of each discharge:	
	Average flow per di	ischarge:	mgd
	Months in which dis		
<sup>5</sup> !	g. Is outfall equipped		YesXNo
.10.	Description of Recei	ving Waters.	
ŧ	a. Name of receiving v	water <u>DuPage Ri</u>	ver
ŀ	b. Name of watershed	(if known) <u>Des Plain</u>	es Watershed
	United States Soil C	Conservation Service 14-digit wa	ratershed code (if known):
c	:. Name of State Mana	agement/River Basin (if known)	Upper Illinois River Basin
3	United States Geolo	ogical Survey 8-digit hydrologic	cataloging unit code (if known): 07120004
d		eceiving stream (if applicable):	chronicN/A cfs
e	. Total hardness of red	ceiving stream at critical low flo	ow (if applicable):N/A mg/l of CaCO <sub>3</sub>

112 2 2 2 2 2 2 2		10000							
A.11. Description of	f Treatmen	ıt.							
a. What level	s of treatme	ent are provid	ded? Check a	II that apply.					
<u>X</u>	Primary	_	X Seco	ondary					
<u> </u>	Advanced	_	Othe	r. Describe:					
b. Indicate the	e following r	emoval rate	s (as applicat	ole):					
Design BO	D, removal	or Design C	BOD, remova	ıi		95	%		
Design SS	removal		8			95	%		
Design P re						N/A	%		
Design N re					14	80	%		
•					•	N/A			
					•				
May th using	rough Oc sodium b	tober, cl isulfite	nlorinatio	from this outfall on using so	dium hypo	chlorite	, dechlori	nation	
If disinfection	on is by chic	orination, is o	dechlorination	used for this o				No	
<li>d. Does the tree</li>	eatment pla	nt have post	aeration?		-	Ye	es	XNo	
Outfall number	:00	) <u>1</u>			Ι	#1			
PARAME	TER		MAXIMUM DA				RAGE DAILY VA		
			Value	Units	Value	10,133	Units	Number of Samples	
pH (Minimum)			6.8	s.u.	6.8		s.u.	1.095	
pH (Maximum)			7.8	s.u.	7.8	10.00	s.u.	1,095	
Flow Rate			5.66	MGD	22.75			1,095	
Temperature (Winter)			3.20	degrees °F	1		rees °F	23	
Temperature (Summer * For pH please r				degrees °F	63-20	deg	rees °F	20	
POLLUTANT	eport a minim	MAXIMU	JM DAILY LARGE	1 (0)	DAILY DISCH	IARGE	ANALYTICAL METHOD	ME/MDL	
		Conc.	Units	Conc.	Units	Number of Samples			
CONVENTIONAL AN	D NONCO	NVENTIONA	L COMPOU	NDS.					
BIOCHEMICAL OXYGEN	BOD-5							N W	
DEMAND (Report one)	CBOD-5	15	mg/L	2	mg/L	471	SM 5210B	1	
FECAL COLIFORM		589	cfu/100m	43	cfu/100m	238	SM 9222D	1	
TOTAL SUSPENDED SOL	IDS (TSS)	51	mg/L	2	mg/L	471	SM 2540D	0.2	

END OF PART A. REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

#### FACILITY NAME AND PERMIT NUMBER:

Springbrook Water Reclamation Center NPDES Permit No. IL0034061

Form Approved 1/14/99 OMB Number 2040-0086

## WASTEWATER DISCHARGES!

If you answered Eyes (to question A.8.a) compléte questions A/8 through A/12 once for each outfall (including bypass points) through which efficient is discharged. Por formation or combined sever overflows in this section. If you answered £no \* for question A/8.a, go to Part B.\* Additional Application bromation of Applicanis with a Design Flow Greater than on Equal to 0.4 mig of the section of the property of the section o

	And the second second			17.	<b>2000年1月</b>
A.9.	•	*	8: 5: 5:	£ 5	
8	a. Outfall number	002			14
	b. Location	Naperville	5 A x	60540	•
4/		(City or town, if applicable)	3	(Zip Code)	
		DuPage	- W	Illinois	S
		(County)	A	(State)	
		41 deg. 44 mi	in 4 sec. N	88 deg. 7 min. 38	sec. W
	71 1 f aba	(Latitude)	N/A ft.	(Longitude)	
	c. Distance from sho	re (if applicable)	ft.		
	- Don'th holow gurfa	//tioshis)	N/A ff.	s)	
	d. Depth below surface	ce (it applicable)	10-		₩ ₩
	Assessed delly flour	ala (S	0	% ± ± ± ± ± ± ± ± ± ± ± ± ± ± ± ± ± ± ±	a - 6
W	e. Average daily flow	rate	mg	Jq.	
(i)	C Door this puriful he		G A 45 E 8 8	and a set p	
-	t. Does this outfall ha periodic discharge?	ave either an intermittent or a	a Yes	No (go to A.9.g.)	
ÿ	hainne aleasa ac.	7	<u>A</u> 100		~ ~ ~
-11	If yes, provide the f	following information:	20 00 7	v _ = 20 _20 _0 _0	14
*		<i>v</i>	0 0 4= 1	i rii	2
	Number of times pe	er year discharge occurs:	0 to 1	1 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	e E
	Average duration of	each discharge:	03/08/09 for 12 hrs	., 12/27/08 for 33 hr	:S
	Average flow per dis	scharge:	11.88	mgd	9
17		_	March, December	104 5 To 100	2
10	Months in which disc	charge occurs:	ratur, bosses		%• ≉ %
Ç	g. Is outfall equipped w	with a diffuser?	Yes X	No No	o ~ ~ ~ a
	, 10 Outon equip	Aut a umass.	(i. 12):	140	17 g
	· · · · · · · · · · · · · · · · · · ·	A	· ·	8	VI
10. U	Description of Receiv	ing Waters.	** ** ** ** ** ** ** ** ** ** ** ** **	v 13 s	2°°°
а	. Name of receiving wa	vater West	Branch, DuPage River		
****	· Hamo or rocarring		A S	107	2 C 2
ь	. Name of watershed (	(if known) Des F	Plaines Watershed	8 8 6	
<b>-</b>	. Hallo or management,	, it Knowny			
	United States Soil Co	onservation Service 14-digit	watershed code (if,known):	20 MH - 2	890 KK
	o dinto	Moderation Control 1	Matorollou ocus (injunio)	# %	
C.	Name of State Mana	gement/River Basin (if know	vn): Upper Illinois	River Basin	
111	Tuniy or orang manage	Journal of Parent for mices	240 11		
	United States Geolog	ical Survey 8-digit hydrolog	ic cataloging unit code (if know	vn): <u>07120004</u>	* # *
	~	W # # # #		\$ 100 s	A te
d.		ceiving stream (if applicable		15	20
	acuteN/A	cfs	chronic N/A	cfs	=
01		20	2		8 (5
е.	Total hardness of rece	siving stream at critical low	flow (if applicable): N/A	mg/l of CaCO <sub>3</sub>	
	d	a 8 50 26		if:	
*	· 1	30 <sub>-10</sub>	8 8 B	° ×	1.7
			16 <u>0</u> 411		

NPDES Permit	NO. IL U	)34061						
A.11. Description	of Treatmer	nt.	•					
a. What lev	els of treatme	ent are provi	ided? Check	all that apply.			윰	
	Primary	_	Se	condary				
	. Advanced	_	X Otl	ner. Describe:	No	t designe	d for trea	tment
b. Indicate t	he following i	removal rate	s (as applic	able):				20
Design B	OD₅ removal	or Design C	BOD <sub>s</sub> remov	val	-	N/A	%	A10
Design S	S removal				¥	N/A	%	7-5
Design P	removal			ē a		N/A	%	
Design N	removal				9	N/A	%	
1					52-1-5		%	54
				t from this outfal	12 If disinfo	otion varies t	ov season inlead	sa dasariba
c. vvnat type		on is used it	n trie emiden	it nom this outlan	ir ii qisiine	Zilon vanes i	y scason, pica	se describe.
-	N/A							
If disinfect	ion is by chlo	rination, is	dechlorinatio	on used for this o	utfall?	Y	es	No
d. Does the t	reatment plai	nt have post	aeration?	70		Y	es	No
Outfall numbe	r:0(	5		and Asy	10.00	* III x	1 4 PN	
PARAME	TER	A	MAXIMUM D	AILY VALUE	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	AVE	RAGE DAILY VA	22 - 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
with the wife			Value	Units	Valu	0	Units	Number of Samples
pH (Minimum)			7.5	s.u.	7.5		s.u.	
pH (Maximum)			7.5	s.u.	7.5	- 1.38/15 AP. 1	s.u.	1
Flow Rate		1	7.4	MGD	0	_	MGD	1
Temperature (Winter)					- XIPIEA		17 15	
* For pH please i		m and a maxir	num daily valu	le				
POLLUTANT	4 5 5 W 4 4 4 5	MAXIMU	M DAILY	The Partie of th	DAILY DISC		ANALYTICAL	ML/MDL
TOLLOTAN		Election of the second	ARGE	er og til Er synt episates i light og	・ 10名 (現 かであ	elv -	METHOD	4
		Conc.	Units	Conc.	Units	Number of Samples	lan=	
CONVENTIONAL AN	D NONCON'	VENTIONAL	COMPOU	NDS.	3	The state of the s	Lati	23
BIOCHEMICAL OXYGEN	BOD-5	25	mg/L	25	mg/L	1	SM 5201B	1
DEMAND (Report one)	CBOD-5	20	mg/L	20	mg/L	1	SM 5201B	-1
FECAL COLIFORM								
TOTAL SUSPENDED SOL	IDS (TSS)	47.0	mg/L	40	mg/L	2 .	SM 2540D	0.2

END OF PART A.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER: Springbrook Water Reclamation Center NPDES Permit No. IL0034061

Form Approved 1/14/99 OMB Number 2040-0086

### WASTEWATER DISCHARGES!

If you answered \* yes No question A 3:a, complete questions A 9 through A 12 pace for each outfall (including bypass points) through which enfluents discharged Donot include information on combined sever overflows in this section. If you answered a no "to question ARI'a, no to Part 35. Additional Application Information for Applicants with a Design Flow Greater than one qual to 2.1 mpg.

A. C.	<b>在共同和国的</b>	基格。1945年第178日中海		Buch Card The Card	45、16、14公里的整理。18.6
A.9.	Description of Outfal	Ai. 2	2 2 2	8	
- 2	a. Outfall number	003			× 5
	b. Location	Naperville	- 1 4 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	60563	
2		(City or town, if applicable)		(Zip Code)	- - - -
		DuPage		Illinois (State)	_ v
		(County) 41 deg. 46 min.	54 sec. N	88 deg. 10 min.	26 sec. W
		(Latitude)	J4 Sec. 11	(Longitude)	20 0001 11
	c. Distance from shore	(if applicable)	N/Aft.	·	
	d. Depth below surface	(if applicable)	N/A ft.	~	8
	e. Average daily flow ra	ite .	0mgd	2) 2) [2]	S. S. S.
57	E ()		□ <sup>34</sup>	W W	9 W.,
27	f. Does this outfall have periodic discharge?	e either an intermittent or a	X Yes	No (go to A.9.g	.)
	If yes, provide the foll	lowing information:			90 V.
	Number of times per	year discharge occurs:	0 to 1	4 2	a
a , '	Average duration of ea	ach discharge:	09/14/08 for 4 hrs.	7 <sup>2</sup> 8	
2	Average flow per disch		1.32	mgd	* 8
. 2	Months in which disch	arge occurs:	September	<u>S</u>	g 2 2
g	g. Is outfall equipped with	h a diffuser?	YesX	No	2 × ×
10. C	Description of Receivin	ig Waters.	× 8	400	5 a
а	a. Name of receiving water	er West	Branch, DuPage River		
b.	. Name of watershed (if	known) Des 1	Plaines Watershed	+ i   155 ·	
41	United States Soil Con	servation Service 14-digit w	ratershed code (if known):	t ge i	S 2
				9	
C.	Name of State Manage	ement/River Basin (if known)	): <u>Upper Illinois R</u>	diver Basin	
	7		4 4 4 4 4 4	- 47120006	**************************************
	United States Geologic	al Survey 8-digit hydrologic	cataloging unit code (if known)	): <u>07120004</u>	<del></del>
. d.	Critical low flow of rece	eiving stream (if applicable):			
	acute N/A	cfs	chronic N/A	cfs	ia .
9	*		1	Ø <sup>™</sup> 0	, s
e.	Total hardness of receiv	ing stream at critical low flo	ow (if applicable):N/A	mg/l of CaCO <sub>3</sub>	
		a #		1 4	30
7.5	0 g	A 185		*	
			Ty I		

A.11. Description	o, ilcualio							
a. What leve			ded? Check a	ill that apply.				
	Primary		Seco					
<del></del>	Advanced		XOthe		Not	designed	d for trea	tment
b. Indicate the	e following	removal rates	s (as applicat	ole):		6		
		l or Design Cl				N/A	%	
Design SS	•	. o. boo.g	5	•		N/A	%	- K
J				F.	-		%	
Design P			80		a	21/22		
Design N r		•			-			
					-		%	18
c. What type	of disinfect	ion is used for	r the effluent	from this outfal	1? If disinfect	ion varies b	y season, ple	ease describe.
N/A								
If disinfecti	on is by ch	lorination, is d	lechlorination	used for this o	utfall? _	Y	es	No
d. Does the tr	eatment nl:	ant have post	aeration?	12		Y	es	No
through which information re addition, this requirements must be base	n effluent i eported mu data must for standa d on at lea	s. Provide the second of the s	l. Do not incl on data colle QA/QC requ for analytes	lude information ected through sirements of 4	on on combi analysis co CFR Part 1 bv 40 CFR I	ined sewer nducted us 36 and oth Part 136. A	itting author overflows ir sing 40 CFR i ner appropria t a minimum	i, ettiuent testing da
through which information re addition, this requirements must be base Outfall number	n effluent i eported mu data must for standa d on at lea	s. Provide the second discharged ust be based comply with and methods to state three samples.	l. Do not incl on data colle QA/QC requ for analytes ples and mu	lude information of the content of t	required by on on combi analysis cor CFR Part 1 by 40 CFR I than four ar	ined sewer inducted us i36 and oth Part 136. A ind one-half	roverflows in sing 40 CFR in the service of the ser	n this section. All Part 136 methods. I ite QA/QC i, effluent testing d
through which information re addition, this requirements must be base	n effluent i eported mu data must for standa d on at lea	s. Provide the second discharged ust be based comply with and methods to three samples.	J. Do not incloud on data college (DA/QC required for analytes ples and mu	lude information of the content of t	required by on on combi analysis cor CFR Part 1 by 40 CFR I than four ar	ned sewer nducted us 36 and oth Part 136. A nd one-half	overflows in sing 40 CFR in the appropriate a minimum f years apart.	This section. All Part 136 methods. I te QA/QC a, effluent testing day.
through which information readdition, this requirements must be base. Outfall number	n effluent i eported mu data must for standa d on at lea	s. Provide the selection of the selectio	J. Do not incloud on data college of the college of	lude information of the content of t	required by on on combinanalysis con CFR Part 1 by 40 CFR I than four ar	ined sewer nducted us 36 and oth Part 136. A nd one-half	overflows in sing 40 CFR her appropriat a minimum f years apart	n this section. All Part 136 methods. I ite QA/QC i, effluent testing d
through which information re addition, this requirements must be base. Outfall number PARAME	n effluent i eported mu data must for standa d on at lea	s. Provide the second discharged ust be based comply with and methods for three samples.	J. Do not incloud on data collegates and mu MAXIMUM DA	lude information ected through airements of 40 not addressed at be no more all YALUE units s.u.	required by on on combinantlysis conditions of the conditions of t	ined sewer nducted us 36 and oth Part 136. A nd one-half	overflows in sing 40 CFR in the appropriate a minimum fyears apart.  ERAGE DAILY In the appropriate a minimum fyears apart.	This section. All Part 136 methods. I Ite QA/QC I, effluent testing de  /ALUE  Number of Sample
through which information readdition, this requirements must be based Outfall number PARAME	n effluent i eported mu data must for standa d on at lea	s. Provide the second discharged ust be based comply with and methods to state three same to 3	J. Do not incloud on data college of analytes ples and mu MAXIMUM DA Value 7.2	lude information of the content of t	y required by on on combinantlysis conditions of the condition of the cond	ined sewer nducted us 36 and oth Part 136. A nd one-half	ering author overflows in sing 40 CFR in the appropriate a minimum f years apart.  ERAGE DAILY VIIIts  S.U.  S.U.	This section. All Part 136 methods. I te QA/QC to the part 136 methods. I te QA/QC to the part 1 testing de la
through which information readdition, this requirements must be base. Outfall number PARAME OH (Minimum) OH (Maximum)	effluent i eported mu data must for standa d on at lea	s. Provide the second discharged ust be based comply with and methods to state three same of the second discharge di	J. Do not incloud on data collegates and mu MAXIMUM DA	lude information ected through airements of 40 not addressed at be no more all YALUE units s.u.	required by on on combinantlysis conditions of the conditions of t	ined sewer nducted us 36 and oth Part 136. A nd one-half	overflows in sing 40 CFR in the appropriate a minimum fyears apart.  ERAGE DAILY In the appropriate a minimum fyears apart.	This section. All Part 136 methods. I Ite QA/QC I, effluent testing de  /ALUE  Number of Sample
through which information readdition, this requirements must be based Outfall number PARAME OH (Minimum) OH (Maximum) OH (Maximum) OH (Maximum) OH (Maximum)	effluent i eported mu data must for standa d on at lea	s. Provide the second discharged ust be based comply with and methods to state three same of the second discharge di	J. Do not incloud on data college of analytes ples and mu MAXIMUM DA Value 7.2	lude information of the content of t	y required by on on combinantlysis conditions of the condition of the cond	ined sewer nducted us 36 and oth Part 136. A nd one-half	ering author overflows in sing 40 CFR in the appropriate a minimum f years apart.  ERAGE DAILY VIIIts  S.U.  S.U.	This section. All Part 136 methods. I te QA/QC to the part 136 methods. I te QA/QC to the part 1 testing de la
through which information readdition, this requirements must be based Outfall number PARAME OH (Minimum) OH (Maximum) OH (Maximum) OH (Maximum) OH (Maximum)	effluent i eported mu data must for standa d on at lea	s. Provide the sidischarged ust be based comply with and methods if st three same 103	I. Do not incloud on data college on data college of the college o	lude information ected through airements of 40 not addressed at be no more lity VALUE.  Units  s.u.  s.u.  MGD	y required by on on combinantlysis con CFR Part 1 by 40 CFR 1 than four arthur arthur 1 than four arthur 1 t	ined sewer nducted us 36 and oth Part 136. A nd one-half	er appropriate a minimum f years apart  ERAGE DAILY \ Units  S.U.  MGD	This section. All Part 136 methods. I ate QA/QC at effluent testing day.  /ALUE  Number of Sample
through which information re addition, this requirements must be base Outfall number  PARAME  H (Minimum)  H (Maximum)  low Rate emperature (Winter) emperature (Summe	effluent i eported mu data must for standa d on at lea	s. Provide the sidischarged ust be based comply with and methods if st three same to 3	MAXIMUM DA Value  7 - 2  1 - 32  num daily value M DAILY	lude information ected through airements of 40 not addressed at be no more lity value.  Units S.U. S.U. MGD	y required by on on combinantlysis conditions of the condition of the cond	ined sewer inducted us i36 and oth Part 136. A and one-half	ering author overflows in sing 40 CFR in the appropriate a minimum f years apart.  ERAGE DAILY VIIIts  S.U.  S.U.	This section. All Part 136 methods. I ate QA/QC i, effluent testing disconnection of Sample  1 1 1
through which information re addition, this requirements must be base Outfall number  PARAME  H (Minimum)  H (Maximum)  low Rate emperature (Winter) emperature (Summe * For pH please re	effluent i eported mu data must for standa d on at lea	s. Provide the sidischarged ust be based comply with and methods if st three same 103	MAXIMUM DA Value  7 - 2  1 - 32  num daily value M DAILY	lude information ected through airements of 40 not addressed at be no more lity value.  Units S.U. S.U. MGD	value  7-2  0	ined sewer inducted us i36 and oth Part 136. A and one-half	er appropriate a minimum f years apart  ERAGE DAILY \ Units  S.U.  MGD	ALUE  Number of Sample
through which information readdition, this requirements must be base. Outfall number  PARAME  H (Minimum)  H (Maximum)  low Rate emperature (Winter) emperature (Summer POLLUTANT)	effluent i eported mu data must for standa d on at lea	s. Provide the sidischarged ust be based comply with and methods if st three samples.  MAXIMU DISCH.	. Do not inclon data collega/QC requires and mu  MAXIMUM DA  Value  7.2  7.2  1.32  num daily value  M DAILY  ARGE  Units	lude information ected through airements of 40 not addressed at be no more  ILY VALUE  Units  S.U.  S.U.  MGD  AVERAGE	required by on on combinanalysis con CFR Part 1 by 40 CFR I than four are Value 7.2 7.2 0	ined sewer nducted us 36 and oth Part 136. A nd one-half  AVE	er appropriate a minimum f years apart.  ERAGE DAILY \ Units	ALUE  Number of Sample
through which information readdition, this requirements must be base. Outfall number  PARAME  OH (Minimum)  H (Maximum)  How Rate  emperature (Winter)  emperature (Summer For pH please repollutant	effluent i eported mu data must for standa d on at lea  () TER  D NONCO	s. Provide the sidischarged ust be based comply with and methods if st three samples.  MAXIMU DISCH.	. Do not inclon data collega/QC requires and mu  MAXIMUM DA  Value  7.2  7.2  1.32  num daily value  M DAILY  ARGE  COMPOUN	lude information ected through airements of 40 not addressed at be no more  ILY VALUE  Units  S.U.  S.U.  MGD  AVERAGE	required by on on combinanalysis con CFR Part 1 by 40 CFR I than four are Value 7.2 7.2 0	ined sewer nducted us 36 and oth Part 136. A nd one-half  AVE	er appropriate a minimum f years apart.  ERAGE DAILY \ Units	This section. All Part 136 methods. I ate QA/QC is, effluent testing disconnected by the Mumber of Sample 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
through which information readdition, this requirements must be base. Outfall number  PARAME OH (Minimum) OH (Maximum) Flow Rate Temperature (Winter) Temperature (Summer Pollutant) Tor pH please reported to the pollutant of the	effluent i eported mu data must for standa d on at lea	s. Provide the sidischarged ust be based comply with and methods if st three same to the same of the side of the same of the s	. Do not inclon data collega/QC requires and mu  MAXIMUM DA  Value  7.2  7.2  1.32  num daily value  M DAILY  ARGE  Units	lude information ected through airements of 40 not addressed at be no more lity value.  Units  S.U.  S.U.  MGD  AVERAGE  Conc.	value  DAILY DISCH	Ined sewer Inducted us Is and oth Part 136. A Ind one-half  AVE  IARGE  Number of Samples	er appropriate a minimum f years apart.  ERAGE DAILY \ Units  S.U.  MGD	This section. All Part 136 methods. I ate QA/QC a, effluent testing day.  ALUE  Number of Sample  1 1 1  L ML/MDL
through which information re addition, this requirements must be base. Outfall number  PARAME  OH (Minimum)  OH (Maximum)  Tow Rate  Temperature (Winter)  Temperature (Summer)	effluent i eported mu data must for standa d on at lea  TER  D NONCO BOD-5	s. Provide the sidischarged ust be based comply with and methods if st three same to the s	MAXIMUM DA Value 7 - 2 1 - 32  num daily value M DAILY ARGE Units  COMPOUN	lude information ected through airements of 40 not addressed at be no more lity VALUE.  Units S.U. S.U. MGD  AVERAGE  Conc.  19 15	yequired by on on combinantlysis con or combinantlysis con or combination of the control of the	Ined sewer Inducted us Is and oth Part 136. A Ind one-half  AVE  IARGE  Number of Samples	er appropriate a minimum f years apart.  ERAGE DAILY VUNITS  S.U.  MGD  ANALYTICA  METHOD	This section. All Part 136 methods. I ate QA/QC a, effluent testing day.  ALUE  Number of Sample  1 1 1 L ML/MDL

END OF PART A.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF
FORM 2A YOU MUST COMPLETE

#### B.3. Narrative of Water Balance

At the Springbrook Water Reclamation Center, there is only one discharge point, 001. The influent flow,  $Q_{INF}$ , and effluent flow,  $Q_{EF}$ , of the facility are equal as no water is stored on site. The average flow for the past twelve months was 22.15 MGD. The aeration tanks receive a hydraulic load of both  $Q_{INF}$  and the difference between the Return Activated Sludge Flow,  $Q_{RAS}$ , and the Waste Activated Sludge Flow,  $Q_{WAS}$ . The  $Q_{RAS}$  is typically 45% to 55% of the influent flow but varies based on clarifier performance, storm events, and changes to the MCRT. Likewise, these changes affect the  $Q_{WAS}$  which varies between 0.50 MGD and 0.79 MGD. The flow from the clarifiers to the sand filters and disinfection tanks are equal to  $Q_{INF}$ .

 $Q_{INF} = 22.15 MGD$ 

 $Q_{RAS}$  = 45% to 55%  $Q_{INF}$ 

 $Q_{WAS} = 0.50 \text{ to } 0.79 \text{ MGD}$ 

 $Q_{EFF} = Q_{INF}$ 

FACILITY NAME AND PERMIT NUMBER: Springbrook Water Reclamation Center NPDES Permit No. IL0034061

Form Approved 1/14/99 OMB Number 2040-0086

#### BASIC APPLICATION INFORMATION

PART B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day). AND STATE OF THE PARTY OF THE P

All applicants with a design flow rate > 0.1 mgd must answer questions B.1 through B.6. All others go to Part C (Certification).

B.1. Inflow and Infiltration. Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.

5,500,000 gpd

Briefly explain any steps underway or planned to minimize inflow and infiltration.

The City of Naperville has pursued an aggressive sanitary lining program for the past 8 years, having lined interceptors, trunk sewers and laterals.
Sanitary sewer lining efforts are planned to continue for the next 5 years.

- Topographic Map. Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire area.)
  - a. The area surrounding the treatment plant, including all unit processes.
  - b. The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.
  - Each well where wastewater from the treatment plant is injected underground.
  - d. Wells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.
  - e. Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.
  - f. If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.
- Process Flow Diagram or Schematic. Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g., chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram.

B. <b>4</b> .	Operation/Maintenance Performed by Contractor(s).  Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor?  Yes  X  No
	If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).
	Name:
	Mailing Address:
	Telephone Number:
	Responsibilities of Contractor:
3.5.	Scheduled Improvements and Schedules of Implementation. Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has povered different implementation appendixes as is planning account.

- the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.)
- a. List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule. N/A
- b. Indicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies.

ч	Provide dates imposed by ar	ov compliance schedule	or any actual dates of comp	eletion for the implementation steps listed	1
u.	below, as applicable. For impactual completion dates, as	provements planned ind	ependently of local, State, or	r Federal agencies, indicate planned or	•
	adiaar completion dates, as t	Schedule	Actual Completion		
	Implementation Stage	MM/DD/YYYY	MM/DD/YYYY		
	- Begin construction	,			
	- End construction				
	- Begin discharge				
	- Attain operational level		-		300

#### B.6. EFFLUENT TESTING DATA (GREATER THAN 0.1 MGD ONLY).

Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall Number: \_\_

Describe briefly: \_\_

POLLUTANT	1-117	IM DAILY	AVERAG	E DAILY DISC	HARGE		
	Conc.	Conc. Units Conc. Units Number of Samples		ANALYTICAL METHOD	ML/MDL		
CONVENTIONAL AND NO	ONCONVENTI	ONAL COMP	OUNDS.				***************************************
AMMONIA (as N)	1.8	mg/L	0.3	mg/L	471	SM 4500-NH3D	0.1
CHLORINE (TOTAL RESIDUAL, TRC)	0.07	mg/L	LT 0.05	mg/L	246	SM 4500-CLD	0.05
DISSOLVED OXYGEN	11.6	mg/L	8.3	mg/L	474	SM 4500-0 G	0.1
TOTAL KJELDAHL NITROGEN (TKN)	N/A						
NITRATE PLUS NITRITE NITROGEN	N/A						
OIL and GREASE	LT 1	mg/L	LT 1	mg/L	2	1664A	1
PHOSPHORUS (Total)	5.00	mg/L	3.19	mg/L	43	SM 4500-P E	0.01
TOTAL DISSOLVED SOLIDS (TDS)	N/A						
OTHER	N/A						

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER: Form Approved 1/14/99 OMB Number 2040-0086 Springbrook Water Reclamation Center NPDES Permit No. IL0034061 BASIC APPLICATION INFORMATION PART C. CERTIFICATION All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted. Indicate which parts of Form 2A you have completed and are submitting: Supplemental Application Information packet: X Basic Application Information packet X Part D (Expanded Effluent Testing Data) x Part E (Toxicity Testing: Biomonitoring Data) X Part F (Industrial User Discharges and RCRA/CERCLA Wastes) Part G (Combined Sewer Systems) ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Director of Public Utilities-Water/ Name and official title \_\_James\_E. Wastewater Signature Telephone number Date signed Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

SEND COMPLETED FORMS TO:

#### SUPPLEMENTAL APPLICATION INFORMATION

#### PART D. EXPANDED EFFLUENT TESTING DATA

Refer to the directions on the cover page to determine whether this section applies to the treatment works.

Effluent Testing: 1.0 mgd and Pretreatment Treatment Works. If the treatment works has a design flow greater than or equal to 1.0 mgd or it has (or is required to have) a pretreatment program, or is otherwise required by the permitting authority to provide the data, then provide effluent testing data for the following pollutants. Provide the indicated effluent testing information and any other information required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analyses conducted using 40 CFR Part 136 methods. In addition, these data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. Indicate in the blank rows provided below any data you may have on pollutants not specifically listed in this form. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT			JM DAILY	<b>Y</b> .	Way.	AVERAG	E DAILY	DISCHA	RGE	V	
		Units	Mass	Units	排入		Mass	Units	Number of Samples	ANALYTICAL METHOD**	ML/MDL
METALS (TOTAL RECOVERAB	LE), CYAI	NIDE, PH	ENOLS,	AND HA	RDNES	S.		,			
ANTIMONY	N/A		*01								
ARSENIC	LT 0.002	2 mg/L			LT 0.002	mg/L			2	200.7R4.4	0.002
BERYLLIUM	N/A										
CADMIUM	LT 0.001	mg/L			LT 0.001	mg/L			2	200.7R4.4	0.001
CHROMIUM	LT 0.001	mg/L			LT 0.001	mg/L			2	200.7R4.4	0.001
COPPER	0.004	mg/L		q	.0035	mg/L			2	200.7R4.4	0.001
LEAD	LT 0.002	mg/L			LT ).002	mg/L			2	200.7R4.4	0.002
MERCURY	2.0	ng/L			1.52	mg/L			2	1631E	0.5
NICKEL	0.001	mg/L	2		0.001	mg/L			2	200.7R4.4	0.001
BELENIUM	LT 0.002	mg/L	•	c	LT 0.002	mg/L			2	200.7R4.4	0.002
SILVER	LT 0.001			c	LT .001	mg/L			2	200.7R4.4	0.001
HALLIUM	N/A			-							
INC	0.030	mg/L		o	.027	mg/L			2	200.7R4.4	0.005
YANIDE , TOTAL	LT 0.005	mg/L		o	LT .005	mg/L			2	4500CN,C,E	0.005
	LT 0.010	mg/L			LT .010				2	9066	0.010
ARDNESS (AS CaCO <sub>3</sub> )	N/A								7		
se this space (or a separate sheet)			on on oth	er metal	s reques	sted by the	e permit	writer.			
RON, DISSOLVED	0.05 1				0.03	mg/L			2	200.7R4.4	0.01
LUORIDE	0.76	ng/L			70	mg/L		- 1	2	4500F,C	0.50

PA Form 3510-2A (Rev. 1-99). Replaces EPA forms 7550-6 & 7550-22. F ENV715F.10

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The detection limit was LT 0.005. The second sample used method 420.4R1.0. The result of the sample was LT 0.005.

Parameters that used method 200.7R4.4 for the first sample used method 200.8R5.4

Springbrook Water Reclamation Center

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Outfall number:POLLUTANT	MAXIMUM DAILY				ch outfall discharging effluent to waters o  AVERAGE DAILY DISCHARGE					of the United State	s.)
N/A	Conc.	Units	ARGE Mass	Units	Conc.	Units	Mass	Units	Number of Samples	ANALYTICAL METHOD	ML/MDL
VOLATILE ORGANIC COMPOUND	MEST < 1685	17.10.1952	Here was	(April 1991)	may september	Ware of the	<b>新</b> 特型 (基	(Kar - 19)	Samples	o I Hamildonia	
ACROLEIN			3								
ACRYLONITRILE											
BENZENE											
BROMOFORM											
CARBON TETRACHLORIDE											
CLOROBENZENE											
CHLORODIBROMO-METHANE										41	0
CHLOROETHANE										*	
2-CHLORO-ETHYLVINYL ETHER											
CHLOROFORM	- 17										E .
DICHLOROBROMO-METHANE											
1,1-DICHLOROETHANE										*>	
1,2-DICHLOROETHANE									SW.		
TRANS-1,2-DICHLORO-ETHYLENE										-	
1,1-DICHLOROETHYLENE						2			7	0.150	
1,2-DICHLOROPROPANE											
1,3-DICHLORO-PROPYLENE											
ETHYLBENZENE											
METHYL BROMIDE						U #			).		
METHYL CHLORIDE											
METHYLENE CHLORIDE			n .						*1		
,1,2,2-TETRACHLORO-ETHANE											
ETRACHLORO-ETHYLENE									x	\$5.	
OLUENE											×

Outfall number:		(Compl	ete onc	e for ea	ch outfa	II disch	arging	effluent	to waters o	of the United State	es.)
POLLUTANT	100	MAXIMU	JM DAIL'	<b>Y</b>	A	VERAG	E DAILY	DISCHA	ARGE	,	8ff2 > 8
N/A	Conc.		Mass	Units	Conc.	Units	Mass	Units	Number of Samples	ANALYTICAL METHOD	ML/MDL
1,1,1-TRICHLOROETHANE											
1,1,2-TRICHLOROETHANE											
TRICHLORETHYLENE											
VINYL CHLORIDE											
Use this space (or a separate shee	t) to provi	ide inform	ation on	other vola	atile organ	nic comp	ounds re	quested	by the permit	writer.	~
ACID-EXTRACTABLE COMPOUR	NDS	4			· · · · · · · · · · · · · · · · · · ·						
P-CHLORO-M-CRESOL						-	*/				
2-CHLOROPHENOL											
2,4-DICHLOROPHENOL											
2,4-DIMETHYLPHENOL									3		
4,6-DINITRO-O-CRESOL											
2,4-DINITROPHENOL											65
2-NITROPHENOL											
4-NITROPHENOL						2.				, and the second second	
PENTACHLOROPHENOL					14				***************************************		
PHENOL											
2,4,6-TRICHLOROPHENOL											
Use this space (or a separate sheet	) to provid	le informa	ation on o	ther acid	-extractat	ble comp	ounds re	equested	by the permi	t writer.	,
BASE-NEUTRAL COMPOUNDS.											1.0
ACENAPHTHENE							1				
ACENAPHTHYLENE											
ANTHRACENE							ie.				
BENZIDINE											**
BENZO(A)ANTHRACENE		-									
BENZO(A)PYRENE											

Springbrook Water Reclamation Center

NPDES Permit No. IL034061

Form Approved 1/14/99 OMB Number 2040-0086

(Complete once for each outfall discharging effluent to waters of the United States.) Outfall number: MAXIMUM DAILY DISCHARGE AVERAGE DAILY DISCHARGE POLLUTANT N/A Units Number ANALYTICAL ML/MDL Units Mass Units Conc. Units Mass Conc. METHOD of Samples 3.4 BENZO-FLUORANTHENE BENZO(GHI)PERYLENE BENZO(K)FLUORANTHENE **BIS (2-CHLOROETHOXY) METHANE** BIS (2-CHLOROETHYL)-ETHER BIS (2-CHLOROISO-PROPYL) ETHER BIS (2-ETHYLHEXYL) PHTHALATE 4-BROMOPHENYL PHENYL **ETHER** BUTYL BENZYL PHTHALATE 2-CHLORONAPHTHALENE 4-CHLORPHENYL PHENYL ETHER **CHRYSENE** DI-N-BUTYL PHTHALATE DI-N-OCTYL PHTHALATE DIBENZO(A,H) ANTHRACENE 1,2-DICHLOROBENZENE 1,3-DICHLOROBENZENE 1,4-DICHLOROBENZENE 3,3-DICHLOROBENZIDINE DIETHYL PHTHALATE **DIMETHYL PHTHALATE** 2,4-DINITROTOLUENE 2,6-DINITROTOLUENE 1,2-DIPHENYLHYDRAZINE

Springbrook Water Reclamation Center NPDEC Pormit No. TI0034061

POLLUTANT	MAXIMUM DAILY DISCHARGE				E P	VERAG	E DAILY	DISCHA	RGE	LAY 6.	1
, <b>N/A</b>	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples	ANALYTICAL METHOD	ML/MDL
FLUORANTHENE										P	
FLUORENE											
HEXACHLOROBENZENE											
HEXACHLOROBUTADIENE											
HEXACHLOROCYCLO- PENTADIENE											
HEXACHLOROETHANE											
INDENO(1,2,3-CD)PYRENE	8										
SOPHORONE			-								
NAPHTHALENE											-
NITROBENZENE										- 8	
N-NITROSODI-N-PROPYLAMINE	*2										
N-NITROSODI- METHYLAMINE								K		8	
I-NITROSODI-PHENYLAMINE					829						
PHENANTHRENE											
YRENE			=								
,2,4-TRICHLOROBENZENE										,	
se this space (or a separate sh	eet) to	provide	inform	ation or	other t	pase-ne	utral co	mpoun	ds requeste	ed by the permit	writer.
se this space (or a separate sh	eet) to	provide	informa	ation or	other p	oollutan	ts (e.g.,	, pestici	des) reques	sted by the perm	it writer.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF , 1994y FORM 2A YOU MUST COMPLETE

**FACILITY NAME AND PERMIT NUMBER:** 

Springbrook Water Reclamation Center

NPDES Permit No. IL0034061

Form Approved 1/14/99 OMB Nymber 2040-0086

#### SUPPLEMENTAL APPLICATION INFORMATION

#### PART E. TOXICITY TESTING DATA

See attached Appendix A.

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting

authority to submit data for these parameters.

• At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.

In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.

If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E.

If no biomonitoring data is required, do not continue the form to complete.	omplete Part E. Refer to	the Application Overview for dire	ctions on which other sections of
E.1. Required Tests. Indicate the number of whole effluent chronic acute	nt toxicity tests conducte	ed in the past four and one-half ye	ears.
E.2. Individual Test Data. Complete the follo	owing chart <u>for each who</u>	ele effluent toxicity test conducted i	n the last four and one-half
years. Allow one column per test (where Test nu	each species constitute:	s a test). Copy this page if more the Test number:	Test number:
a. Test information.			
Test species & test method number			
Age at initiation of test			
Outfall number			
Dates sample collected	25		
Date test started	7		
Duration			
b. Give toxicity test methods followed.			
Manual title	*		
Edition number and year of publication			
Page number(s)			
c. Give the sample collection method(s)	used. For multiple grab	samples, indicate the number of	grab samples used.
24-Hour composite			
Grab			
d. Indicate where the sample was taken i	n relation to disinfection	n. (Check all that apply for each)	·
Before disinfection			
After disinfection			
After dechlorination			

Spring	gbrook	Water	Re	clamation	Center
_				0034061	

	Test number:	Test number:	Test number:
e. Describe the point in the tre	atment process at which the samp	ole was collected.	
Sample was collected:			
f. For each test, include wheth	ner the test was intended to assess	s chronic toxicity, acute toxicity, or	both.
Chronic toxicity			
Acute toxicity			
g. Provide the type of test perfe	ormed.		
Static	*	¥	
Static-renewal			
Flow-through			
h. Source of dilution water. If la	aboratory water, specify type; if rec	ceiving water, specify source.	Λ =
Laboratory water			
Receiving water			
i. Type of dilution water. If salt	water, specify "natural" or type of	artificial sea salts or brine used.	
Fresh water		2 2	
Salt water			
j. Give the percentage effluent	used for all concentrations in the	test series.	
And the Market of the Saya Control		:#1	
k. Parameters measured during	the test. (State whether paramet	er meets test method specificatio	ns)
рН		6 II	
Salinity			
Temperature			
Ammonia			
Dissolved oxygen			
I. Test Results.			
Acute:	0.415		
Percent survival in 100% effluent	%	%	%
LC <sub>so</sub>			
95% C.I.	%	%	%
Control percent survival	%	%	%
Other (describe)	1		

**FACILITY NAME AND PERMIT NUMBER:** Form Approved 1/14/99 Springbrook Water Reclamation Center OMB Number 2040-0086 NPDES Permit No. IL0034061 Chronic: % % NOEC % IC<sub>25</sub> % % Control percent survival % % Other (describe) m. Quality Control/Quality Assurance. Is reference toxicant data available? Was reference toxicant test within acceptable bounds? What date was reference toxicant test run (MM/DD/YYYY)? Other (describe) E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation? \_\_ No If yes, describe: \_\_\_\_\_ E.4. Summary of Submitted Biomonitoring Test Information. If you have submitted biomonitoring test information, or information regarding the cause of toxicity, within the past four and one-half years, provide the dates the information was submitted to the permitting authority and a summary of the results. 05/28/09, 08/25/09, Date submitted: 11/17/09, 02/23/10 (MM/DD/YYYY) Summary of results: (see instructions) See attached reports (Appendix A). END OF PART E.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.

### SUPPLEMENTAL APPLICATION INFORMATION

SU	PPLEMENTAL A	APPLICATION IN	FORMATION	
PAR	T F. INDUSTRIAL US	ER DISCHARGES AN	D RCRA/CERCL	A WASTES
All t	reatment works rece edial wastes must co	iving discharges from implete Part F.	n significant ind	dustrial users or which receive RCRA, CERCLA, or other
GEN	IERAL INFORMATI	ON:		
F.1.	Yes	X No		r is it subject to, an approved pretreatment program?
F.2.		ant Industrial Users ( dustrial users that disc		gorical Industrial Users (CIUs). Provide the number of each of the tment works.
	a. Number of non-c	ategorical SIUs	_3	APs.
	b. Number of CIUs.	· ·		
SIGI	NIFICANT INDUSTI	RIAL USER INFORM	MATION:	
		rmation for each SIU the Information reque		ne SIU discharges to the treatment works, copy questions F.3
F.3.			Provide the name	e and address of each SIU discharging to the treatment works.
	Submit additional pa	-	al Corporatio	ion & Technical Center
	Mailing Address:	One Nalco Cer	nter, 1601 D	Diehl Road
	Mailing Address.	Naperville, 1		
F.4. F.5.	<u>Chemical Rese</u>	earch,Testing o	of Inorganic  Of Describe all of the second control of the second	ses that affect or contribute to the SIU's discharge.  and Organic Chemicals  the principal processes and raw materials that affect or contribute to
	Principal product(s):	Chemical Res	search, Labor	oratory Testing
	Raw material(s):	Inorganic an	nd Organic Cl	Chemicals
F.6.	Flow Rate.			
	system in gallons	ter flow rate. Indicate t per day (gpd) and wh gpd ( <u>X</u> _ contin	ether the discharg	volume of process wastewater discharged into the collection rge is continuous or intermittent.
	collection system	tewater flow rate. Indic in gallons per day (gp gpd ( <u>X</u> _contin	d) and whether th	daily volume of non-process wastewater flow discharged into the the discharge is continuous or intermittent.
F. <b>7</b> ,	Pretreatment Stand	ards. Indicate whether	the SIU is subject	ect to the following:
·	a. Local Limits		<u>x</u> Yes	2
	b. Categorical pretre	eatment standards	YesX	. No
	If subject to categoric	al pretreatment standa	ards, which categ	gory and subcategory?

LITY NAME AND PERMIT NUMBER:	Form Approved 1/14	1/99
	OMB Number 2040-	
Problems at the Treatment Works Attributed to Waste Discharg problems (e.g., upsets, interference) at the treatment works in the page 15 problems (e.g., upsets, interference) at the treatment works in the page 15 problems (e.g., upsets, interference) at the treatment works in the page 15 problems (e.g., upsets, interference) at the treatment works in the page 15 problems (e.g., upsets, interference) at the treatment works (e.g., u	ged by the SIU. Has the SIU caused or contributed to ast three years?	any
Yes X No If yes, describe each episode:	A	
**************************************		
A HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR D	DEDICATED PIPELINE:	go (27)
RCRA Waste. Does the treatment works receive or has it in the past or dedicated pipe? YesX No (go to F.12.)	t three years received RCRA hazardous waste by tru	ick, rail,
Waste Transport. Method by which RCRA waste is received (check Truck Rail Dedicated Pipe	all that apply):	
Waste Description. Give EPA hazardous waste number and amount  EPA Hazardous Waste Number  Amount	nt (volume or mass, specify units). <u>Units</u>	
		12.
Yes (complete F.13 through F.15.)  X No Provide a list of sites and the requested information (F.13 - F.15.) for	r each current and future site.	
concentration, if known. (Attach additional sheets if necessary).	×	nd
Waste Treatment.  a. Is this waste treated (or will it be treated) prior to entering the treated.  Yes No	atment works?	
Continuous Intermittent If intermittent, o	describe discharge schedule.	
	Ingbrook Water Reclamation Center ES Permit No. IL0034061  Problems at the Treatment Works Attributed to Waste Discharg problems (e.g., upsets, interference) at the treatment works in the problems (e.g., upsets, interference) at the treatment works in the problems (e.g., upsets, interference) at the treatment works in the past of the problems (e.g., upsets, interference) at the treatment works in the past of the problems (e.g., upsets, interference) at the treatment works in the past or dedicated pipe?  RCRA Waste. Does the treatment works receive or has it in the past or dedicated pipe?  Waste Transport. Method by which RCRA waste is received (check problems)  Waste Description. Give EPA hazardous waste number and amount EPA Hazardous Waste Number  Amount  CLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/ ION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER, AND OTHER REMEDI	Amazardous Waster Reclamation Center    Problems at the Treatment Works Attributed to Waste Discharged by the SIU. Has the SIU caused or contributed to problems (e.g., upsets, interference) at the treatment works in the past three years?    Yes X No   If yes, describe each episode:    Yes Yes   Y

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER: Form Approved 1/14/99 OMB Number 2040-0086 Springbrook Water Reclamation Center NPDES Permit No. IL0034061 SUPPLEMENTAL APPLICATION INFORMATION PART G. COMBINED SEWER SYSTEMS If the treatment works has a combined sewer system, complete Part G. N/A G.1. System Map. Provide a map indicating the following: (may be included with Basic Application Information) a. All CSO discharge points. b. Sensitive use areas potentially affected by CSOs (e.g., beaches, drinking water supplies, shellfish beds, sensitive aquatic ecosystems, and outstanding natural resource waters). c. Waters that support threatened and endangered species potentially affected by CSOs. G.2. System Diagram. Provide a diagram, either in the map provided in G.1. or on a separate drawing, of the combined sewer collection system that includes the following information: a. Locations of major sewer trunk lines, both combined and separate sanitary. b. Locations of points where separate sanitary sewers feed into the combined sewer system. c. Locations of in-line and off-line storage structures. d. Locations of flow-regulating devices. e. Locations of pump stations. **CSO OUTFALLS:** Complete questions G.3 through G.6 once for each CSO discharge point. G.3. Description of Outfall. a. Outfall number b. Location (Zip Code) (City or town, if applicable) (County) (Longitude) (Latitude) c. Distance from shore (if applicable) d. Depth below surface (if applicable) e. Which of the following were monitored during the last year for this CSO? \_\_ CSO pollutant concentrations \_\_\_\_ CSO frequency \_ Rainfall \_\_\_\_ Receiving water quality \_\_ CSO flow volume f. How many storm events were monitored during the last year? G.4. CSO Events.

a. Give the number of CSO events in the last year.

\_\_ events ( \_\_\_\_ actual or \_\_\_ approx.)

b. Give the average duration per CSO event.

hours ( \_\_\_\_ actual or \_\_\_ approx.)

### SUPPLEMENTAL APPLICATION INFORMATION

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1.00	RT F. INDUSTRIAL U	Shirk Set Lock of the	<b>经成份的企业企业是从</b> 他的基础。	ALCOHOLOGY ACTIONS AND ACTION	A STATE OF THE STA	
rer	treatment works rec nedial wastes must c	elving discharge complete Part F.	es from significant	t Industrial users or v	which receive RCRA, CERCLA, or othe	i i
	NERAL INFORMAT		ALTON PROD	Park to the second		
F.1.			reatment works hav	e, or is it subject to, ar	n approved pretreatment program?	
	Yes	X_ No	91		2, 3	
F.2.	Number of Signific following types of in	cant Industrial Undustrial Undustrial users the	Jsers (SIUs) and Ca at discharge to the f	ategorical Industrial (treatment works.	Users (CIUs). Provide the number of each	ch of the
	a. Number of non-	categorical SIUs.	3	14		
	b. Number of CIUs	•				
SIG	NIFICANT INDUST	RIAL USER IN	FORMATION:			
Sup thro	ugh F.8 and provide	the information	requested for each	HSIU.	s to the treatment works, copy question	Mr. Char
F.3.	Significant Industri Submit additional pa	al User Informa ages as necessar	ition. Provide the nary.	ame and address of ea	ach SIU discharging to the treatment work	ks.
	Name:	Kraft Fo	•	Œ.	580	
	Mailing Address:	1555 Wes	t Ogden Avenue	e		
	570	CHAIR CONTRACTOR OF THE PARTY O	le, IL 60540	A1		
F.4.	Industrial Processe Production	es. Describe all of of snack cra	f the industrial proceackers.	esses that affect or co	ntribute to the SIU's discharge.	
F.5.	Principal Product(s) the SIU's discharge.	) and Raw Mater	rial(s). Describe all	of the principal proces	sses and raw materials that affect or cont	ribute to
	Principal product(s):	Fiber/whe	eat (Triscuits	s)		
	Raw material(s):	Wheat	,	E	3 · · · · · · · · · · · · · · · · · · ·	
6.	Flow Rate.			, s	· ·	
	system in gallons	per day (gpd) and	cate the average dand whether the disch	harge is continuous or i	wastewater discharged into the collection intermittent.	1
	b. Non-process waste collection system i	ewater flow rate. in gallons per day	Indicate the averag	ge daily volume of non- er the discharge is cont	i-process wastewater flow discharged into tinuous or intermittent.	) the
7, . !	Pretreatment Standa	rds. Indicate wh	ether the SIU is sut	biect to the following:		
	a. Local Limits		_X Yes			
l.	<ul> <li>b. Categorical pretrea</li> </ul>	ntment standards	Yes <u>X</u>	<u>C</u> No		

Spı	ILITY NAME AND PERMIT NUMBER: ringbrook Water Reclamation Center DES Permit No. IL0034061		Form Approved 1/14/99 OMB Number 2040-0086
F.8.		ed by the SIU. Has the SIU ast three years?	caused or contributed to any
	X Yes No If yes, describe each episode:	adi tili oo jou	
	Bulking, increased SVI		
	Average Annual Control of the Contro		
- 1.00			
PCF	RA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR D	DEDICATED DIDEI INE	
			A 12.3 (4.05 (8.1.3)
r.ə.	RCRA Waste. Does the treatment works receive or has it in the past or dedicated pipe? YesX No (go to F.12.)	three years received NUNA	hazardous waste by truck, ra
F.10.	Waste Transport. Method by which RCRA waste is received (check	all that annivis	
••		all triat apply/	4
	Truck Rail Dedicated Pipe	900	
.11.	Waste Description. Give EPA hazardous waste number and amount EPA Hazardous Waste Number Amount	t (volume or mass, specify u <u>Units</u>	ınits).
	37		
			6
-			<u> </u>
5			Į 896
	CLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/C ON WASTEWATER, AND OTHER REMEDIAL ACTIVITY WAS		
		TO THE CONTRACT OF THE PARTY OF	
	Remediation Waste. Does the treatment works currently (or has it bee	an notified that it will) receive	waste from remedial activities
	Yes (complete F.13 through F.15.)		
×	Provide a list of sites and the requested information (F.13 - F.15.) for e	each current and future site.	•
	*	ž.,	
13. 1	Waste Origin. Describe the site and type of facility at which the CERC	CLA/RCRA/or other remedia	al waste originates (or is
•	expected to originate in the next five years).		# ####################################
_	1000		
			2
-			
-			
4. F	Pollutants. List the hazardous constituents that are received (or are exponentration, if known. (Attach additional sheets if necessary).	*	
_			
5. V	Vaste Treatment.		
		المعامدة المعامدة	
С.	. Is this waste treated (or will it be treated) prior to entering the treatr	Ment works?	
	YesNo		
	If yes, describe the treatment (provide information about the remov	/al efficiency):	
			V6.
	X X		
h	to the discharge (or will the discharge he) continuous or intermitten	40	
D.	Is the discharge (or will the discharge be) continuous or intermittent	(7	39 89
	Continuous Intermittent If intermittent, det	escribe discharge schedule.	
1.11	END OF DART	Land to the second	A HOMES AND THE STATE OF
F	END OF PART I REFER TO THE APPLICATION OVERVIEW TO DET	TERMINE WHICH OT	THER PARTS OF
	FORM 2A YOU MUST CO	OMPLETE	

Springbrook Water Reclamation Center NPDES Permit No. IL0034061

### SUPPLEMENTAL APPLICATION INFORMATION

PA	RT F. INDUSTRIAL U	SER DISCHARG	ES AND RCRA/CE	RCLA WASTES	2		
All	treatment works rec nedial wastes must o	elving discharge complete Part F	es from significant	是10年至10日本10日本主义	or Which receive	RCRA, CERCLA	, or other
_	NERAL INFORMAT						
F.1.	Pretreatment Prog	gram. Does the tr	reatment works have	e, or is it subject to	, an approved pre	etreatment progran	1?
F.2.	Number of Signific following types of in	cant Industrial Undustrial Undustrial users the	Jsers (SIUs) and Ca at discharge to the t	ategorical Industr reatment works.	iai Users (CIUs).	Provide the numb	er of each of the
	a. Number of non-	_					
	b. Number of CIUs	i. ai		:(#6			
SIG	NIFICANT INDUST	RIAL USER IN	FORMATION:		A Property Constitution of the Constitution of		
thro	ply the following Info ugh F.8 and provide	the information	requested for each	hsiu.	<b>是由某个主要的</b>	<b>"然"的"主"的"特"</b>	
F.3.	Significant Industri Submit additional pa	ial User Informa ages as necessar	ition. Provide the nav.	ame and address o	f each SIU discha	arging to the treatn	nent works.
	Name:	- '	Corporation	*		9	-00
	Mailing Address:	150 West	Manuacud 11a D.	•	*		
		130 Mest	Warrenville Ro	oad			
	e e		e, IL 60563	oad			
F.4.	Industrial Processe Pilot plant t	Napervilles. Describe all of esting/batch	e, IL 60563  f the industrial proce h production f	esses that affect or For commercia	1 research.		<u> </u>
F.4. F.5.	Industrial Processe	Napervilles. Describe all of esting/batch	e, IL 60563  f the industrial proce h production f	esses that affect or For commercia	1 research.		t or contribute to
	Industrial Processe Pilot plant t Principal Product(s	Napervilles. Describe all of esting/batch	e, IL 60563  f the industrial proce h production f	esses that affect or For commercial of the principal pro	1 research.	materials that affec	
F. <b>5</b> .	Industrial Processe Pilot plant t  Principal Product(s) the SIU's discharge.	Naperville es. Describe all of esting/batch ) and Raw Mater  Commercial	e, IL 60563  f the industrial proce h production f  rial(s). Describe all	esses that affect or For commercial of the principal pro Chemical and	1 research.  ocesses and raw r  Biological P	materials that affec	
F.5.	Industrial Processe Pilot plant t  Principal Product(s) the SIU's discharge. Principal product(s):	Naperville es. Describe all of esting/batch ) and Raw Mater  Commercial	e, IL 60563  f the industrial proce h production f  rial(s). Describe all  1, Physical, C	esses that affect or For commercial of the principal pro Chemical and	1 research.  ocesses and raw r  Biological P	materials that affec	
F.5.	Industrial Processe Pilot plant t  Principal Product(s) the SIU's discharge. Principal product(s): Raw material(s): Flow Rate.  a. Process wastewat system in gallons	Naperville  s. Describe all of esting/batch  and Raw Mater  Commercial  Petroleum,  ter flow rate. Indic per day (gpd) an	e, IL 60563  f the industrial proce h production f  rial(s). Describe all  1, Physical, C  , Inorganic an	esses that affect or for commercial of the principal prochemical and indoorganic Chamber of the continuous of the processing of the principal	1 research.  ocesses and raw r  Biological P  emicals	materials that affective of Re	esearch
F.5.	Principal Product(s) the SIU's discharge. Principal product(s): Raw material(s): Flow Rate.  a. Process wastewat system in gallons 70,000  b. Non-process waste collection system in	Naperville  s. Describe all of esting/batch  and Raw Mater  Commercial  Petroleum,  ter flow rate. Indic per day (gpd) and gpd (X c)  ewater flow rate. in gallons per day (appl)	f the industrial process h production f rial(s). Describe all l, Physical, C , Inorganic and cate the average date whether the disches continuous ori	esses that affect or for commercial of the principal proceedings of the principal procedure of the principal and organic Charge is continuous intermittent) ge daily volume of the discharge is continuous of the dischar	1 research.  Docesses and raw in the Biological Properties and properties and raw in the Biological Properties and properties was to be a second properties and properties	materials that affective of Residuents of Re	esearch
F.5. ∹6.	Principal Product(s) the SIU's discharge. Principal product(s): Raw material(s): Flow Rate.  a. Process wastewat system in gallons 70,000  b. Non-process waste collection system in	Naperville  s. Describe all of esting/batch  and Raw Mater  Commercial  Petroleum,  ter flow rate. Indic per day (gpd) an gpd (X c ewater flow rate. in gallons per day gpd (X c)	f the industrial process h production f  rial(s). Describe all  1, Physical, C  , Inorganic and  cate the average date whether the disches continuous ori  Indicate the average y (gpd) and whether in the continuous ori	esses that affect or for commercial of the principal prochemical and independent of the principal prochemical and organic Chemical and organic Chemical and organic Chemical and organic Chemittent) and organic chemittent)	1 research.  Decesses and raw research.  Biological Pemicals  ess wastewater discorrections or intermittent.	materials that affective of Residuents of Re	esearch
F.5. F.6.	Industrial Processe Pilot plant t  Principal Product(s) the SIU's discharge. Principal product(s):  Raw material(s):  Flow Rate.  a. Process wastewat system in gallons 70,000  b. Non-process waste collection system is 20,600	Naperville  s. Describe all of esting/batch  and Raw Mater  Commercial  Petroleum,  ter flow rate. Indic per day (gpd) an gpd (X c ewater flow rate. in gallons per day gpd (X c)	f the industrial process h production f  rial(s). Describe all  1, Physical, C  , Inorganic and  cate the average date whether the disches continuous ori  Indicate the average y (gpd) and whether in the continuous ori	of the principal prochemical and ind Organic Chemical and independent of proceedings of the discharge is continuous intermittent) and discharge is continuous intermittent) are daily volume of a the discharge is contermittent)	1 research.  Decesses and raw research.  Biological Pemicals  ess wastewater discorrections or intermittent.	materials that affective of Residuents of Re	esearch
F.5. F.6.	Industrial Processe Pilot plant t  Principal Product(s) the SIU's discharge. Principal product(s):  Raw material(s):  Flow Rate.  a. Process wastewat system in gallons 70,000  b. Non-process waste collection system is 20,600  Pretreatment Standa	Naperville  s. Describe all of esting/batch  and Raw Mater  Commercial  Petroleum,  ter flow rate. Indic per day (gpd) and gpd (X compared to gpd)  ewater flow rate. In gallons per day gpd (X compared to gpd)  gpd (X compared to gpd)	f the industrial process for production for product	esses that affect or for commercial of the principal process. The commercial and of the principal process. The commercial and organic Charge is continuous intermittent) are daily volume of the discharge is contermittent) because the following of the principal princi	1 research.  Decesses and raw research.  Biological Pemicals  ess wastewater discorrections or intermittent.	materials that affective of Residuents of Re	esearch

**FACILITY NAME AND PERMIT NUMBER:** Form Approved 1/14/99 Springbrook Water Reclamation Center OMB Number 2040-0086 NPDES Permit No. IL0034061 F.8. Problems at the Treatment Works Attributed to Waste Discharged by the SIU. Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years? Yes X No If yes, describe each episode: RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE: RCRA Waste. Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail. or dedicated pipe? \_\_\_\_\_ Yes \_\_X\_ No (go to F.12.) F.10. Waste Transport. Method by which RCRA waste is received (check all that apply): \_\_\_\_\_ Dedicated Pipe F.11. Waste Description. Give EPA hazardous waste number and amount (volume or mass, specify units). EPA Hazardous Waste Number Units Amount CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER: F.12. Remediation Waste. Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities? Yes (complete F.13 through F.15.) Provide a list of sites and the requested information (F.13 - F.15.) for each current and future site. F.13. Waste Origin. Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is expected to originate in the next five years). F.14. Pollutants. List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, if known. (Attach additional sheets if necessary). F.15. Waste Treatment. a. Is this waste treated (or will it be treated) prior to entering the treatment works? \_\_ Yes \_\_\_\_ No If yes, describe the treatment (provide information about the removal efficiency): b. Is the discharge (or will the discharge be) continuous or intermittent? \_ Continuous \_ Intermittent If intermittent, describe discharge schedule. END OF PART F.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER: Form Approved 1/14/99 Springbrook Water Reclamation Center OMB Number 2040-0086 NPDES Permit No. IL0034061 c. Give the average volume per CSO event. \_\_\_\_\_ million gallons ( \_\_\_\_ actual or \_\_\_ approx.) d. Give the minimum rainfall that caused a CSO event in the last year. \_\_\_\_\_ inches of rainfall G.5. Description of Receiving Waters. a. Name of receiving water: \_\_\_ b. Name of watershed/river/stream system: \_\_\_\_\_ United States Soil Conservation Service 14-digit watershed code (if known): c. Name of State Management/River Basin: \_\_\_\_\_\_ United States Geological Survey 8-digit hydrologic cataloging unit code (if known): G.6. CSO Operations. Describe any known water quality impacts on the receiving water caused by this CSO (e.g., permanent or intermittent beach closings, permanent or intermittent shell fish bed closings, fish kills, fish advisories, other recreational loss, or violation of any applicable State water quality standard). END OF PART G. REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF

FORM 2A YOU MUST COMPLETE.

Illinois Environmental Protection Agency Bureau of Water, Division of Water Pollution Control, Permit Section 1021 North Grand Avenue East

P.O. Box 19276

Springfield, Illinois 62794-9276

Form Approved 1/14/99 OMB Number 2040-0086

FACILITY NAME AND PERMIT NUMBER: Springbrook Water Reclamation Center

NPDES Permit No. IL0034061

FORM 2S

NEDES FORM 25 APPLICATION OMERWIEW

NPDES

#### PRELIMINARY INFORMATION

This page is designed to indicate whether the applicant is to complete Part 1 or Part 2. Review each category, and then complete Part 1 or Part 2, as indicated. For purposes of this form, the term "you" refers to the applicant. "This facility" and "your facility" refer to the facility for which application information is submitted.

# FACILITIES INCLUDED IN ANY OF THE FOLLOWING CATEGORIES MUST COMPLETE PART 2 (PERMIT APPLICATION INFORMATION).

- 1. Facilities with a currently effective NPDES permit.
- 2. Facilities which have been directed by the permitting authority to submit a full permit application at this time.

ALL OTHER FACILITIES MUST COMPLETE PART 1 (LIMITED BACKGROUND INFORMATION).

Information required by this form must be provided to comply with 415 ILCS 5/39 (1998). Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

Form Approved 1/14/99 OMB Number 2040-0086

FACILITY NAME AND PERMIT NUMBER: Springbrook Water Reclamation Center NPDES Permit No. IL0034061

DE.	and South	FALLULULUS SANGRAMANININININININININININININININININININ	
his	par	t should be completed only by "sludge-only" facilities - that is, facilities that do not currently have, and are not a permit for a direct discharge to a surface body of water.	pplying for, an
OΓ	purt	poses of this form, the term "you" refers to the applicant. "This facility" and "your facility" refer to the facility fo ion is submitted.	r which application
	Fac	ility Information.	6
0	a.	Facility name N/A	
	b.	Mailing Address	
		(3.0)	
	C.	Contact person	
		Title	
		Telephone number	
	ď.	Facility Address (not P.O. B ox)	
€	e.	Indicate the type of facility  Publicly owned treatment works (POTW) Privately owned treatment works	
		Federally owned treatment works Blending or treatment operation	
		Surface disposal site Sewage sludge incinerator	
		Other (describe)	
<u>2.</u>	App	licant Information.	
	a.	Applicant name N/A	
	b.	Mailing Address	,
			K.
	C.	Contact person	
		Title	
		Telephone number	
	d.	Is the applicant the owner or operator (or both) of this facility?	
		owner operator  Should correspondence regarding this permit be directed to the facility or the applicant?	8

\_\_\_ facility

\_ applicant

FACILITY NAME AND PERMIT NUMBER:  Springbrook Water Reclamation Center  NPDES Permit No. IL0034061  Form Approved 1/14/ OMB Number 2040-4						
3.	Sewage Sludge Amount	. Provide the total dry metric tons per	latest 365 day pe	riod of sewage sludg	e handled under the following practices:	
	a. Amount generated at	t the facility N/A			dry metric tons	
	b. Amount received from	n off site			dry metric tons	
	c. Amount treated or bl			,	dry metric tons	
	d. Amount sold or giver	away in a bag or other container for a	application to the I	and dry metric tons		
		ige sludge shipped off site for treatmen		dry metric tons		
	f. Amount applied to th			dry metric tons		
	g. Amount placed on a	surface disposal site			dry metric tons	
	h. Amount fired in a sev	vage sludge incinerator		-	dry metric tons	
	i. Amount sent to a mu	nicipal solid waste landfill			dry metric tons	
	j. Amount used or disp	osed by another practice			dry metric tons	
	Describe				<u></u>	
4.	which limits in sewage slu three or more samples tak	dge have been established in 40 CFR en at least one month apart and no mo	part 503 for this ore than four and	acility's expected us one-half years old.	sludge monitoring data for the pollutants for e or disposal practices. If available, base data on N/A DETECTION LEVEL FOR ANALYSIS	
	POLLUTANT	(mg/kg dry weight)	A STATE OF THE PROPERTY OF THE	CAL METHOD	DE ECHON LEVEL FOR ARABISIS	
ARS	SENIC					
CAE	MUIMO					
CHF	ROMIUM	4				
COF	PPER					
LEA	ND .					
MEF	RCURY					
MOI	LYBDENUM			5		
NIC	KEL	7			*	
SEL	ENIUM					
ZIN	С					
5.	Class A	ogen reduction does the sewage sludg	r or unknown		o reduce pathogens in sewage sludge:	
			11	X		

C.	Which vector attraction reduction option is met for the sewage sludge at your facility?	
	Option 1 (Minimum 38 percent reduction in volatile solids)	
	Option 2 (Anaerobic process, with bench-scale demonstration)	
	Option 3 (Aerobic process, with bench-scale demonstration)	
	Option 4 (Specific oxygen uptake rate for aerobically digested sludge)	
	Option 5 (Aerobic processes plus raised temperature)	
	Option 6 (Raise pH to 12 and retain at 11.5)	
	Option 7 (75 percent solids with no unstabilized solids)	
	Option 8 (90 percent solids with unstabilized solids)	
	Option 9 (Injection below land surface)	
	Option 10 (Incorporation into soil within 6 hours)	
	Option 11 (Covering active sewage sludge unit daily)	
	None or unknown	
d.	Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce vectorizes:	tor attraction properties of sev
	F = 1	
con	ncentrations, Class A pathogen requirements, and one of the vector attraction options 1-8?  Yes NoN/A	12
on If you	No N/A es, go to question 8 (Certification).  o, is sewage sludge from your facility provided to another facility for treatment, distribution, use, or disNo  o, go to question 7 (Use and Disposal Sites).	18
if ye	YesNo N/A es, go to question 8 (Certification).  o, is sewage sludge from your facility provided to another facility for treatment, distribution, use, or disYesNo  o, go to question 7 (Use and Disposal Sites). es, provide the following information for the facility receiving the sewage sludge:	8
if ye	YesNo N/A es, go to question 8 (Certification).  o, is sewage sludge from your facility provided to another facility for treatment, distribution, use, or disYesNo  o, go to question 7 (Use and Disposal Sites). es, provide the following information for the facility receiving the sewage sludge:  Facility name	18
f ye	YesNo N/A es, go to question 8 (Certification).  o, is sewage sludge from your facility provided to another facility for treatment, distribution, use, or disYesNo  o, go to question 7 (Use and Disposal Sites). es, provide the following information for the facility receiving the sewage sludge:	18
f ye	Yes No N/A es, go to question 8 (Certification).  o, is sewage sludge from your facility provided to another facility for treatment, distribution, use, or disYes No  o, go to question 7 (Use and Disposal Sites).  es, provide the following information for the facility receiving the sewage sludge:  Facility name  Mailing address	8
f ye	No N/A es, go to question 8 (Certification).  o, is sewage sludge from your facility provided to another facility for treatment, distribution, use, or disNo  o, go to question 7 (Use and Disposal Sites). es, provide the following information for the facility receiving the sewage sludge:  Facility name  Mailing address  Contact person	18
f no	Yes No N/A es, go to question 8 (Certification).  o, is sewage sludge from your facility provided to another facility for treatment, distribution, use, or dis Yes No  o, go to question 7 (Use and Disposal Sites). es, provide the following information for the facility receiving the sewage sludge:  Facility name  Mailing address  Contact person  Title	18
f ne f ye	No N/A es, go to question 8 (Certification).  o, is sewage sludge from your facility provided to another facility for treatment, distribution, use, or disNo  o, go to question 7 (Use and Disposal Sites). es, provide the following information for the facility receiving the sewage sludge:  Facility name  Mailing address  Contact person	18
on If ye		18
on  If you  If no	YesNo N/A es, go to question 8 (Certification).  o, Is sewage sludge from your facility provided to another facility for treatment, distribution, use, or disYesNo o, go to question 7 (Use and Disposal Sites). es, provide the following information for the facility receiving the sewage sludge: Facility name Mailing address  Contact person  Title  Telephone number  Which activities does the receiving facility provide? (Check all that apply)  Treatment or blending Sale or give-away in bag or other container	sposal?
con  If ye  If ne  If ye  a.	es, go to question 8 (Certification).  o, is sewage sludge from your facility provided to another facility for treatment, distribution, use, or dis	8
on If ye	YesNo N/A es, go to question 8 (Certification).  o, Is sewage sludge from your facility provided to another facility for treatment, distribution, use, or disYesNo o, go to question 7 (Use and Disposal Sites). es, provide the following information for the facility receiving the sewage sludge: Facility name Mailing address  Contact person  Title  Telephone number  Which activities does the receiving facility provide? (Check all that apply)  Treatment or blending Sale or give-away in bag or other container	8
con  If ye  If ne  If ye  a.	es, go to question 8 (Certification).  o, is sewage sludge from your facility provided to another facility for treatment, distribution, use, or dis	8

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7.	Use a.	and Disposal Sites. Provi	de the following information for each site of	on which sewage studge from th	is facility is used or	r disposed:
	a.				,	
		Site name or number	N/A			
	b.	Contact person				
		Title	Œ.			
		Telephone				
		5	-		<del></del>	N.
	C.	Site location (Complete 1 of	ir 2)			
		Street or Route #	A CONTRACTOR CONTRACTO			
		County	C 9	-		
		City or Town	State	Zip		
		2. Latitude	Longitude			
(	<b>d</b> .	Site type (Check all that ap	ny)			
		Agricultural	Lawn or home gardenPublic Contact	Forest	× 2	
		Surface disposal Reclamation	Municipal Solid Waste Landfill _	Incineration		
			on statement below. (Refer to instruction			

SEND COMPLETED FORMS TO:

# PART 2: PERMIT APPLICATION INFORMATION

Complete this part if you have an effective NPDES permit or have been directed by the permitting authority to submit a full permit application at this time. In other words, complete this part if your facility has, or is applying for, an NPDES permit.

For purposes of this form, the term "you" refers to the applicant. "This facility" and "your facility" refer to the facility for which application information is submitted.

# APPLICATION OVERVIEW — SEWAGE SLUDGE USE OR DISPOSAL INFORMATION

Part 2 is divided into five sections (A-E). Section A pertains to all applicants. The applicability of Sections B, C, D, and E depends on your facility's sewage sludge use or disposal practices. The information provided on this page indicates which sections of Part 2 to fill out.

1. SECTION A: GENERAL INFORMATION.

Section A must be completed by all applicants

2. SECTION B: GENERATION OF SEWAGE SLUDGE OR PREPARATION OF A MATERIAL DERIVED FROM SEWAGE SLUDGE.

Section B must be completed by applicants who either:

- 1) Generate sewage sludge, or
- 2) Derive a material from sewage sludge.
- SECTION C: LAND APPLICATION OF BULK SEWAGE SLUDGE.

Section C must be completed by applicants who either:

- 1) Apply sewage to the land, or
- Generate sewage sludge which is applied to the land by others.

NOTE: Applicants who meet either or both of the two above criteria are exempted from this requirement <u>if all</u> sewage sludge from their facility falls into one of the following three categories:

- The sewage sludge from this facility meets the ceiling and pollutant concentrations, Class A pathogen reduction requirements, and one of vector attraction reduction options 1-8, as identified in the instructions, or
- The sewage sludge from this facility is placed in a bag or other container for sale or give-away for application to the land, or
- The sewage sludge from this facility is sent to another facility for treatment or blending.
- 4. SECTION D: SURFACE DISPOSAL

Section D must be completed by applicants who own or operate a surface disposal site.

5. SECTION E: INCINERATION

Section E must be completed by applicants who own or operate a sewage sludge incinerator.

### Sewage Sludge Narrative:

Waste Activate Sludge is taken from the process and pumped into a Walker Process Gravity Thickener. The thickened waste activated sludge is then pumped into one of six aerobic digesters. As the sludge digests, it is thickened by two Komline-Sanderson Gravity Belt Thickeners and returned to digestion for additional volatile solids reduction. The digesters are also cycled between aerobic and anoxic phases to increase digestion and to recover alkalinity.

After digestion, the solids are transferred to a holding tank and later dewatered to approximately 21% cake using two Humbolt Centrifuges. The cake is then stored in a 120'X360' enclosed biosolids storage building until it is ready to be hauled away to farm fields for beneficial reuse.

The process produces Class B biosolids. Vector attraction reduction is accomplished by calculating a minimum of 38% volatile solids reduction. Pathogen reduction is proven by calculating the geometric mean of *fecal coliform* for seven samples taken over a two week period. The attached schematic can provide further details on the flow of sludge and biosolids throughout the facility.

A .	CENE	EDA1	INEC	TION

١.	GE	NERAL INFORMATION	
All a	ppli	cants must complete this section.	
۱.1.	Fac	ility Information.	
	a.	Facility name	Springbrook Water Reclamation Center
	b.	Mailing Address	400 South Eagle Street, P.O. Box 3020
			Naperville, Illinois 60566-7020
	C.	Contact person	David A. Nykiel, P.E.
		Title	Operations Manager
		Telephone number	(630)420-6122
	d.	Facility Address (not P.O. Box)	3712 Plainfield/Naperville Road
			Naperville, Illinois 60564-4170
	e.	Is this facility a Class I sludge managem	ent facility? X Yes No
	f.	Facility design flow rate: 26.25 mgd	
	g.	Total population served: 156,000	
	h.	Indicate the type of facility:	
			(POTW) Privately owned treatment works
		Federally owned treatment works	Blending or treatment operation  Sewage sludge incinerator
		Surface disposal site Other (describe)	Sewage sludge incinerator
			erent from the above, provide the following:
<b>\.</b> 2.			City of Naperville
	a.	Applicant name  Mailing Address	400 South Eagle Street, P.O. Box 3020
	b.	Maling Address	Naperville, Illinois 60566-7020
	C.	Contact person	James E. Holzapfel, P.E.
	U.	Title	Director of Public Utilities-Water/Wastewater
		Telephone number	(630)420-6131
	4	Is the applicant the owner or operator (or	
	d.	X owner X operator	
	•		rmit should be directed to the facility or the applicant.
	e.	facility X applicant	111 - 11 - 11 - 11 - 11 - 11 - 11 - 11
		racinty applicant	

A.3	3. Permit Information.						
	a. Facility's NPDES permit number (if applicable): NPDES Permit No. IL0034061						
	b.	List, on this form or an attachment, all ot facility's sewage sludge management pro	her Federal, State, and local permits or construction approvals received or applied for that regulate this actices:				
		Permit Number Type	of Permit				
		2007-SC-5031 II	<u> CPA - Land Application of Sewage Sludge</u>				
	25	2007-SC-5031-1 Ch	ange in Monitoring Frequency				
A.4.	Indi	an Country. Does any generation, treatn	nent, storage, application to land, or disposal of sewage sludge from this facility occur in Indian Country?				
		Yes X No If yes, de	scribe:				
A.5.	Тор	ographic Map. Provide a topographic ma	up or maps (or other appropriate map(s) if a topographic map is unavailable) that show the following				
	infor	mation. Map(s) should include the area of	ne mile beyond all property boundaries of the facility:				
	a.	Location of all sewage sludge management	ent facilities, including locations where sewage sludge is stored, treated, or disposed.				
	b.	Location of all wells, springs, and other s facility property boundaries.	urface water bodies, listed in public records or otherwise known to the applicant within 1/4 mile of the				
A.6.	of th	e permit, including all processes used for	a narrative description that identifies all sewage sludge processes that will be employed during the term collecting, dewatering, storing, or treating sewage sludge, the destination(s) of all liquids and solids thogen reduction and vector attraction reduction.				
A.7.	Cont	tractor Information.					
		any operational or maintenance aspects of ractor? X YesNo	this facility related to sewage sludge generation, treatment, use or disposal the responsibility of a				
	If ye:	s, provide the following for each contractor	(attach additional pages if necessary):				
	a.	Name	Stewart Spreading				
	b.	Mailing Address	3870 N. Route 71				
		F	Sheridan, IL 60551				
9		Talankana Musikasa	(815)695–5667				
	C.	Telephone Number	h:				
	d.	Responsibilities of contractor	Locate application fields, calculate				
		agronomics, haul sludge	to fields, land apply sludge				
			s a life				

Note: New contract is with Synagro, effective 05/01/10-04/30/12
1250 Larkin Avenue, Suite 10
Elgin, IL 60123
(847)695-5947

Also, some sludge was landfilled by Waste Management of Illinois
1411 Opus Drive
Downers Grove, IL 60515
(630)297-9344

A.8. Pollution Concentrations: Using the table below or a separate attachment, provide sewage sludge monitoring data for the pollutants for which limits in sewage sludge have been established in 40 CFR Part 503 for this facility's expected use or disposal practices. All data must be based on three or more samples taken at least one month apart and must be no more than four and one-half years old. Average from seven samples in 2009.

			III 2007 a		
POLLUTANT	CONCENTRATION (Img/kgrday weight)	ANALYTICAL METHOD	DETECTION LEVEL FOR ANALYSIS		
ARSENIC	3.04	7060A	1.0 mg/kg		
CADMIUM	1.04	7130	1.00 mg/kg		
CHROMIUM	26.8	7190	0.75 mg/kg		
COPPER	588	7210	0.25 mg/kg		
LEAD	18.1	7420	1.25 mg/kg		
MERCURY	0.50	7470A	0.05 mg/kg		
MOLYBDENUM	13.9	6010B	1.0 mg/kg		
NICKEL	17.8	7520	0.75 mg/kg		
SELENIUM	7.17	7740	0.25 mg/kg		
ZINC	779	7950	0.25 mg/kg		

_	Certification. Read and submit the following certification statement with this application. Refer to the instructions to determine who is an officer for purposes of this certification. Indicate which parts of Form 2S you have completed and are submitting:				
Part 1 Limited Background Information packet	Part 2 Permit Application Information packet:				
	X Section A (General Information)				
	Section B (Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge)				
v .	X Section C (Land Application of Bulk Sewage Sludge)				
	Section D (Surface Disposal)				
N	Section E (Inclneration)				

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with the system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title	James E. Holzapfell PA	E Director of Public Utiliti	es-Water/
Signature	TO TOTAL	Date signed	Wastewater -
Telephone number	(630)420-6131	1	-

Upon request of the permitting authority, you must submit any other information necessary to assess sewage sludge use or disposal practices at your facility or identify appropriate permitting requirements.

SEND COMPLETED FORMS TO:

B.	GENERATION OF SEWAGE SLUDGE OR PREPARATION OF
	A MATERIAL DERIVED FROM SEWAGE SLUDGE

		10 (1 -1 (11 1 1- 11 1- 1- 1- 1- 1- 1- 1- 1- 1-	SEVAGE SLUDGE	Salah er e Okonist salah kendi	anamalar patrophismoska zakolom i Prazisto	
Cor	nplet	e this section if your facility genera	tes sewage sludge or derive	s a material from sev	rage sludge.	
	Tota	al dry metric tons per 365-day period g		2,246.8		Lacroide the following
B.2.	info	ount Received from Off Site. If your mation for each facility from which senecessary.	wage sludge is received. If yo	ù receive sewage sluc	ge nom more than one racing	i, provide the following , attach additional pages
040	a.	Facility name	N/A		and the second s	
	b.	Mailing Address				<del>-</del>
		.i				_
	C.	Contact person  Title				-
		Telephone number				_
	d.	Facility Address (not P.O. Box)				
						-
	e.	Total dry metric tons per 365-day pe	riod received from this facility:	-	dry metric tons	
	f.	Describe, on this form or on another and treatment to reduce pathogens of	sheet of paper, any treatment or vector attraction characteris	processes known to o lics.	ccur at the off-site facility, inc	luding blending activities
B.3.	Trea	tment Provided At Your Facility.				
	a.	Which class of pathogen reduction is	achieved for the sewage sluc	lge at your facility?	8 =	
				er or unknown		
	b.	Describe, on this form or another she Aerobic Digestion		ocesses used at your fa	acility to reduce pathogens in	sewage sludge: —
	C.	Which vector attraction reduction opt	ion is met for the sewage sluc	ge at your facility?		
		Option 1 (Minimum 38 pero	ent reduction in volatile solids is, with bench-scale demonsti	) ation)		
		Option 3 (Aerobic process,	with bench-scale demonstrat	on)		
		Option 4 (Specific oxygen of		sted sludge)		
		Option 5 (Aerobic processe				
		Option 6 (Raise pH to 12 at			¥	
		Option 7 (75 percent solids Option 8 (90 percent solids			* * * *	
		None or unknown				

NPDI	ES	Permit No. IL0034061				
в.з. т	rea	tment Provided At Your Facility. (con't)				
d	d. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce vector attraction p sludge:					
		Aerobic Digestion and Storage				
е.	•	Describe, on this form or another sheet of paper, any other sewage sludge treatment or blending activities not identified in (a) - (d) above:				
conce	ntra	Section B.4 If sewage studge from your facility meets the ceiling concentrations in Table 1 of 40 CFR 503.13, the pollutant ations in Table 3 of §503.13, the Class A pathogen reduction requirements in §503.32(a), and one of the vector attraction reduction ents in § 503.33(b)(1)-(8) and is land applied. Skip this section if sewage studge from your facility does <u>not</u> meet all of these criteria.				
	rep	N/A aration of Sewage Sludge Meeting Celling and Pollutant Concentrations, Class A Pathogen Requirements, and One of Vector action Reduction Options 1-8.				
a.		Total dry metric tons per 365-day period of sewage sludge subject to this section that is applied to the land: dry metric tons				
b.		Is sewage sludge subject to this section placed in bags or other containers for sale or give-away for application to the land?				
		YesNo				
the sev B.5. Sa	wag	Section B.5. If you place sewage sludge in a bag or other container for sale or give-away for land application. Skip this section if section B.4.  N/A  or Give-Away in a Bag or Other Container for Application to the Land.				
a.		Total dry metric tons per 365-day period of sewage sludge placed in a bag or other container at your facility for sale or give-away for application to the land:				
b.		Attach, with this application, a copy of all labels or notices that accompany the sewage sludge being sold or given away in a bag or other container for application to the land.				
does n	ot a	Section B.6 if sewage sludge from your facility is provided to another facility that provides treatment or blending. This section apply to sewage sludge sent directly to a land application or surface disposal site. Skip this section if the sewage sludge is covered as B.4 or B.5. If you provide sewage sludge to more than one facility, attach additional pages as necessary.				
B.6. Sh	Nipn	I/A nent Off Site for Treatment or Blending.				
a.	F	Receiving facility name				
b.	٨	Mailing address				
		*				
c.	c	Contact person				
	T	itle				
	Т	elephone number				
d.	Т	otal dry metric tons per 365-day period of sewage sludge provided to receiving facility:				

FACILITY NAME AND PERMIT NUMBER: Springbrook Water Reclamation Center

3.6.	Ship	oment Off Site for Treatment or Blending. (con't)
	e.	Does the receiving facility provide additional treatment to reduce pathogens in sewage sludge from your facility?YesNo
		Which class of pathogen reduction is achieved for the sewage sludge at the receiving facility?
		Class A Class B Neither or unknown
		Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce pathogens in sewage sludge:
	f.	Does the receiving facility provide additional treatment to reduce vector attraction characteristics of the sewage sludge?
		Which vector attraction reduction option is met for the sewage sludge at the receiving facility?
		Option 1 (Minimum 38 percent reduction in volatile solids) Option 2 (Anaerobic process, with bench-scale demonstration) Option 3 (Aerobic process, with bench-scale demonstration) Option 4 (Specific oxygen uptake rate for aerobically digested sludge) Option 5 (Aerobic processes plus raised temperature) Option 6 (Raise pH to 12 and retain at 11.5) Option 7 (75 percent solids with no unstabilized solids) Option 8 (90 percent solids with unstabilized solids) None
		Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce vector attraction properties of sewage sludge.
	g.	Does the receiving facility provide any additional treatment or blending activities not identified in (c) or (d) above? Yes No
		If yes, describe, on this form or another sheet of paper, the treatment or blending activities not identified in (c) or (d) above:
24	h.	If you answered yes to (e), (f), or (g), attach a copy of any information you provide the receiving facility to comply with the "notice and necessary information" requirement of 40 CFR 503.12(g).
	i.	Does the receiving facility place sewage sludge from your facility in a bag or other container for sale or give-away for application to the land?  Yes No
531	171. 2	if yes, provide a copy of all labels or notices that accompany the product being sold or given away.  Be Section B.7 if sewage sludge from your facility is applied to the land, unless the sewage sludge is covered in:
ion	ipleti	Section B.7 if sewage studge from your facility is applied to the tank, <u>and some states</u> . Section B.4 (it meets Table 1 ceiling concentrations, Table 3 pollutant concentrations, Class A pathogen requirements, and one of vector attraction reduction options 1-8); <u>or</u> Section B.5 (you place it in a bag or other container for sale or give-away for application to the land); <u>or</u> Section B.6 (you send it to another facility for treatment or blending).
3.7.	Lan	d Application of Bulk Sewage Sludge. For Calendar Year 2009, actual land applied quantity  Total dry metric tons per 365-day period of sewage sludge applied to all land application sites: 1,739.4 dry metric tons

B.7	Lan	d Application of Bulk Sewage	Sludge. (con't)	
	b.	•	tion sites in Section C of this application? X YesNo	İ
			application plan with application (see instructions).	
				al from sawage sludge
	C.	Are any land application sites it	ocated in States other than the State where you generate sewage sludge or derive a materi No	ai itom sewaye siduye i
	are	If yes, describe, on this form or located. Provide a copy of the n	another sheet of paper, how you notify the permitting authority for the States where the lar otification.	nd application sites
		(a)		_
Com	nlet	e Section B.8 If sewage sludge	from your facility is placed on a surface disposal site.	
_	_		310m) Aut 1.00m) 4.5 p. 1.00m	
В.8.		face Disposal. N/A	sludge from your facility placed on all surface disposal sites per 365-day period:	dry metric tons
	a.			,
	b.	Do you own or operate all surfa	ce disposal sites to which you send sewage sludge for disposal?	
		Yes No		
			f for each surface disposal site that you do not own or operate. If you send sewage sludge attach additional pages as necessary.	e to more than one
	c.	Site name or number		
	d.	Contact person		
		Title		
		Telephone number		
		Contact is	Site ownerSite operator	œ
	e.	Mailing address		9
			The second state of the second	
	f.		sludge from your facility placed on this surface disposal site per 365-day period:	_ dry metric tons
Com	plete	Section B.9 If sewage sludge	from your facility is fired in a sewage sludge incinerator.	
B. <b>9</b> .	Incir	neration. N/A		
;	a.	Total dry metric tons of sewage	sludge from your facility fired in all sewage sludge incinerators per 365-day period:	_ dry metric tons
ŀ	b.		ge sludge incinerators in which sewage sludge from your facility is fired? Yes _	
			9.f for each sewage sludge incinerator that you do not own or operate. If you send sewagator, attach additional pages as necessary.	e sludge to more than
4	C.	Incinerator name or number:		
(	d.	Contact person:		_
		Title:		
		Telephone number:	3 ×	SF
		Contact is:	Incinerator ownerIncinerator operator	

Spri	ACILITY NAME AND PERMIT NUMBER:  Pringbrook Water Reclamation Center  PDES Permit No. IL0034061						
		eration. (con't)	1001		· ·		
е	•	Mailing address:			-		
					-		
f.		Total dry metric tons of sew	age sludge from your facility fired in this sew	rage sludge incinerator per 365-day period	l: dry metric tons		
Comp	lete	Section B.10 If sewage sli	udge from this facility is placed on a mun	icipal solid waste landfill.			
B.10.		Disposal in a Municipal So sludge from your facility is p necessary.	olid Waste Landfill. Provide the following in laced. If sewage sludge is placed on more t	formation for each municipal solid waste l han one municipal solid waste landfill, atta	andfill on which sewage ach additional pages as		
		a. Name of landfill _	Prairie View RDF				
		b. Contact person	Julie Paramo				
		Title	Senior Operations Spec	ialist			
		Telephone number	(815)423-5120		-		
		Contact is	Landfill owner X La	ndfill operator			
£:		c. Mailing address	29755 S. Prairie View	Drive			
		20	Wilmington, IL 60481		_		
		d. Location of municipal s	olid waste landfill;				
		Street or Route #	29755 S. Prairie View	Drive	-		
		County	Will		=:		
		City or Town	<u>Wilmington</u> S	tate <u>TL</u> Zip <u>60481</u>			
	(	e. Total dry metric tons of	sewage sludge from your facility placed in t	this municipal solid waste landfill per 365-	day period:		
		196	dry metric tons				
	İ	List, on this form or an solid waste landfill.	attachment, the numbers of all other Federa	il, State, and local permits that regulate the	e operation of this municipal		
		Permit Number 1999–291–LF	Type of Permit State	= -			
				<del>-</del>			
	9	<ul> <li>Submit, with this applications sludge in a municipal set</li> </ul>	ation, information to determine whether the solid waste landfill (e.g., results of paint filter	sewage sludge meets applicable requirem liquids test and TCLP test) (See A	ents for disposal of sewage ppendix B)		
	ŧ	n. Does the municipal soli	d waste landfill comply with applicable criter	ria set forth in 40 CFR Part 258?	g ##		
		X Yes	_ No				

Form Approved 1/14/99 OMB Number 2040-0086

### C. LAND APPLICATION OF BULK SEWAGE SLUDGE

Complete Section C for sewage sludge that is applied to the land, unless any of the following conditions apply:

The sewage sludge meets the Table 1 ceiling concentrations, the Table 3 pollutant concentrations, Class A pathogen requirements, and one of vector attraction reduction options 1-8 (fill out B.4 instead); or

Com	• • ple	The sewage sludge is You provide the sewag	ction reduction options 1-8 (fill out B.4 Instead); or sold or given away in a bag or other container for application to the land (fill out B.5 Instead); or e sludge to another facility for treatment or blending (fill out B.6 Instead). e on which the sewage sludge that you reported in Section B.7 is applied.
	ide a.	ntification of Land Applic	cation Site. See attached for Calendar Year 2009 (Appendix C)
	b.	Site location (Complete 1. Street or Route #	1 and 2).
		County	
		City or Town	State Zip
		2. Latitude	Longitude
		Method of latitude/k	ongitude determination
		USGS map	Field survey Other
C	<b>)</b> .	Topographic map. Provid	e a topographic map (or other appropriate map if a topographic map is unavailable) that shows the site location.
t	l. ).		land application site? Yes No g information about the owner:
54		Mailing Address	
C.3. A a	• •		pplies, or who is responsible for application of, sewage sludge to this land application site?No
b		If no, provide the following	information for the person who applies:
		Name	Stewart Spreading
		Telephone number	(815)695–5667
		Mailing Address	3870 N. Route 71
			Sheridan, IL 60551
C.4. Si	te i	Type: Identify the type of I	and application site from among the following.
		X Agricultural land Reclamation site	Forest Public contact site Other. Describe:

FACILITY NAME AND PERMIT NUMBER: Springbrook Water Reclamation Center NPDES Permit No. IL0034061	Form Approved 1/14/99 OMB Number 2040-0086
C.5. Crop or Other Vegetation Grown on Site.	
a. What type of crop or other vegetation is grown on this site?	n - 2
Corn, Soybeans, Wheat	
b. What is the nitrogen requirement for this crop or vegetation?	
Varies, determined by contractor's ago	ronomist
C.6. Vector Attraction Reduction.	Æ
Are any vector attraction reduction requirements met when sewage sludge  Yes X No Tn addition to option	n #1, the City of Naperville's contract on of sludge within 24 hours of arrival
a. Indicate which vector attraction reduction option is met:	
Option 9 (Injection below land surface)	* · · · · · · · · · · · · · · · · · · ·
Option 10 (Incorporation into soil within 6 hours)	
properties of sewage sludge:  Complete Question C.7 only if the sewage sludge applied to this site since	July 20, 1993, is subject to the cumulative pollutant loading rates
(CPLRs) in 40 CFR 503.13(b)(2).	
C.7. Cumulative Loadings and Remaining Allotments.	8:
<ul> <li>Have you contacted the permitting authority in the State where the bulk sewage sludge subject to CPLRs has been applied to this site or</li> </ul>	lk sewage sludge subject to CPLRs will be applied, to ascertain whether nor since July 20, 1993? Yes No
If no, sewage sludge subject to CPLRs may not be applied to this site	
If yes, provide the following information:	
Permitting authority	
Contact Person	*
Telephone number	
b. Based upon this inquiry, has bulk sewage sludge subject to CPLRs be	een applied to this site since July 20, 1993?
If no, skip C.7.c.	
¥	
5	

FACILIT	Y NAME AND PERMIT NUMB	ER:		Approved 1/14/99 Number 2040-0086
C.		on for every facility other than yours that is s e such facility sends sewage sludge to this :	sending, or has sent, bulk sewage sludge to CF site, attach additional pages as necessary.	PLRs to this site since
	Facility name			
	Mailing Address			ž
	Contact person			
	Title		· · · · · · · · · · · · · · · · · · ·	
	Telephone number	<u> </u>		ī

FACILITY NAME AND PERMIT NUMBER: Springbrook Water Reclamation Center NPDES Permit No. IL0034061

### D. SURFACE DISPOSAL N/A

Complete this section if you own or operate a surface disposal site.

a. Unit name or number: N/A  b. Unit location (Complete 1 and 2).  1. Street or Route  County  City or Town  StateZip	
1. Street or Route #  County  City or Town  State Zip	
County City or Town State Zip	
County  City or Town  State Zip	0
2. Latitude	\$
Method of latitude/longitude determination:	
c. Topographic map. Provide a topographic map (or other appropriate map if a topographic map is unavailable) that shows the site lot.  d. Total dry metric tons of sewage sludge placed on the active sewage sludge unit per 365-day period:	
d. Total dry metric tons of sewage sludge placed on the active sewage sludge unit per 365-day period:	Other
e. Total dry metric tons of sewage sludge placed on the active sewage sludge unit over the life of the unit: dry m  f. Does the active sewage sludge unit have a liner with a maximum hydraulic conductivity of 1 × 10 <sup>-7</sup> cm/sec? Yes Yes Yes Yes No  If yes, describe the liner (or attach a description):  g. Does the active sewage sludge unit have a leachate collection system? Yes No  If yes, describe the leachate collection system (or attach a description). Also describe the method used for leachate disposal and numbers of any Federal, State, or local permit(s) for leachate disposal:    h. If you answered no to either D.1.f. or D.1.g., answer the following question:	cation.
f. Does the active sewage sludge unit have a liner with a maximum hydraulic conductivity of 1 × 10 <sup>-7</sup> cm/sec?Yes	etric tons
f. Does the active sewage sludge unit have a liner with a maximum hydraulic conductivity of 1 × 10 <sup>-7</sup> cm/sec?Yes	etric tons
g. Does the active sewage sludge unit have a leachate collection system? Yes No  If yes, describe the leachate collection system (or attach a description). Also describe the method used for leachate disposal and numbers of any Federal, State, or local permit(s) for leachate disposal:  h. If you answered no to either D.1.f. or D.1.g., answer the following question:  Is the boundary of the active sewage sludge unit less than 150 meters from the property line of the surface disposal site?  Yes No  If yes, provide the actual distance in meters:  Provide the following information:	
g. Does the active sewage sludge unit have a leachate collection system? Yes No  If yes, describe the leachate collection system (or attach a description). Also describe the method used for leachate disposal and numbers of any Federal, State, or local permit(s) for leachate disposal:  h. If you answered no to either D.1.f. or D.1.g., answer the following question:  Is the boundary of the active sewage sludge unit less than 150 meters from the property line of the surface disposal site?  Yes No  If yes, provide the actual distance in meters:  Provide the following information:	
If yes, describe the leachate collection system (or attach a description). Also describe the method used for leachate disposal and numbers of any Federal, State, or local permit(s) for leachate disposal:  h. If you answered no to either D.1.f. or D.1.g., answer the following question:  Is the boundary of the active sewage sludge unit less than 150 meters from the property line of the surface disposal site?	
If yes, describe the leachate collection system (or attach a description). Also describe the method used for leachate disposal and numbers of any Federal, State, or local permit(s) for leachate disposal:  h. If you answered no to either D.1.f. or D.1.g., answer the following question:  Is the boundary of the active sewage sludge unit less than 150 meters from the property line of the surface disposal site?  ———————————————————————————————————	
If yes, describe the leachate collection system (or attach a description). Also describe the method used for leachate disposal and numbers of any Federal, State, or local permit(s) for leachate disposal:  h. If you answered no to either D.1.f. or D.1.g., answer the following question:  Is the boundary of the active sewage sludge unit less than 150 meters from the property line of the surface disposal site?  YesNo  If yes, provide the actual distance in meters:  Provide the following information:	
h. If you answered no to either D.1.f. or D.1.g., answer the following question:  Is the boundary of the active sewage sludge unit less than 150 meters from the property line of the surface disposal site?  Yes No  If yes, provide the actual distance in meters:  Provide the following information:	provide the
Is the boundary of the active sewage sludge unit less than 150 meters from the property line of the surface disposal site?  Yes No  If yes, provide the actual distance in meters:  Provide the following information:	
Is the boundary of the active sewage sludge unit less than 150 meters from the property line of the surface disposal site?  Yes No  If yes, provide the actual distance in meters:  Provide the following information:	
Is the boundary of the active sewage sludge unit less than 150 meters from the property line of the surface disposal site?  Yes No  If yes, provide the actual distance in meters:  Provide the following information:	
YesNo  If yes, provide the actual distance in meters:  Provide the following information:	
YesNo  If yes, provide the actual distance in meters:  Provide the following information:	
Provide the following information:	
Remaining capacity of active sewage sludge unit, in dry metric tons: dry metric tons	
Continuing actions of some control of the control o	
Anticipated closure date for active sewage sludge unit, if known:(MM/DD/YYYY)	

#### FACILITY NAME AND PERMIT NUMBER: Springbrook Water Reclamation Center NPDES Permit No. IL0034061

D.2. Sewage Sludge from Other Facilities. Is sewage sent to this active sewage sludge unit from any facilities other than your facility? If yes, provide the following information for each such facility. If sewage sludge is sent to this active sewage sludge unit from more than one such facility, attach additional pages as necessary. Facility name Mailing Address b. Contact person Title Telephone number Which class of pathogen reduction is achieved before sewage sludge leaves the other facility? Class A Class B None or unknown Describe, on this form or another sheet of paper, any treatment processes used at the other facility to reduce pathogens in sewage sludge: Which vector attraction reduction option is met for the sewage sludge at the receiving facility? Option 1 (Minimum 38 percent reduction in volatile solids) Option 2 (Anaerobic process, with bench-scale demonstration) Option 3 (Aerobic process, with bench-scale demonstration) Option 4 (Specific oxygen uptake rate for aerobically digested sludge) Option 5 (Aerobic processes plus raised temperature) Option 6 (Raise pH to 12 and retain at 11.5) Option 7 (75 percent solids with no unstabilized solids) Option 8 (90 percent solids with unstabilized solids) None or unknown Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce vector attraction properties of sewage sludge Describe, on this form or another sheet of paper, any other sewage sludge treatment activities performed by the other facility that are not identified in (d) - (g) above: **D.3. Vector Attraction Reduction** Which vector attraction option, if any, is met when sewage sludge is placed on this active sewage sludge unit? Option 9 (Injection below and surface) Option 10 (Incorporation into soil within 6 hours) Option 11 (Covering active sewage sludge unit daily)

MIL	LID	Telmit No. 110054001
D.3.	Vec	tor Attraction Reduction. (con't)
	b.	Describe, on this form or another sheet of paper, any treatment processes used at the active sewage sludge unit to reduce vector attraction properties of sewage sludge:
D.4.	Gro	und-Water Monitoring.
	a.	Is ground-water monitoring currently conducted at this active sewage sludge unit, or are ground-water monitoring data otherwise available for this active sewage sludge unit?  Yes No
		If yes, provide a copy of available ground-water monitoring data. Also, provide a written description of the well locations, the approximate depth to ground-water, and the ground-water monitoring procedures used to obtain these data.
	b.	Has a ground-water monitoring program been prepared for this active sewage sludge unit?YesNo
		If yes, submit a copy of the ground-water monitoring program with this permit application.
	C.	Have you obtained a certification from a qualified ground-water scientist that the aquifer below the active sewage sludge unit has not been contaminated?  Yes No
		If yes, submit a copy of the certification with this permit application.
D.5.	Site-	Specific Limits. Are you seeking site-specific pollutant limits for the sewage sludge placed on the active sewage sludge unit?YesNo
		If yes, submit information to support the request for site-specific pollutant limits with this application.

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E. INCINERATION Complete this section if you fire sewage sludge in a sewage sludge incinerator. Complete this section once for each incinerator in which you fire sewage sludge. If you fire sewage sludge in more than one sewage sludge Incinerator, attach additional copies of this section s necessary. E.1. Incinerator Information. N/A Incinerator name or number: Incinerator location (Complete 1 and 2). 1. Street or Route # County \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_ City or Town Latitude\_ Longitude\_\_\_\_\_ \_\_\_\_ USGS map \_\_\_\_ Field survey Method of latitude/longitude determination: E.2. Amount Fired. Dry metric tons per 365-day period of sewage sludge fired in the sewage sludge incinerator. \_\_\_\_\_\_ dry metric tons E.3. Beryllium NESHAP. a. Is the sewage sludge fired in this incinerator "beryllium-containing waste," as defined in 40 CFR Part 61.31? \_\_\_\_\_ Yes\_\_\_\_\_ No Submit, with this application, information, test data, and description of measures taken that demonstrate whether the sewage sludge incinerated is beryllium-containing waste, and will continue to remain as such. If the answer to (a) is yes, submit with this application a complete report of the latest beryllium emission rate testing and documentation of ongoing incinerator operating parameters indicating that the NESHAP emission rate limit for beryllium has been and will continue to be met. E.4. Mercury NESHAP. How is compliance with the mercury NESHAP being demonstrated? \_\_ Stack testing (if checked, complete E.4.b) \_\_\_\_ Sewage sludge sampling (if checked, complete E.4.c) If stack testing is conducted, submit the following information with this application: A complete report of stack testing and documentation of ongoing incinerator operating parameters indicating that the incinerator has met, and will continue to meet, the mercury NESHAP emission rate limit. Copies of mercury emission rate tests for the two most recent years in which testing was conducted. If sewage sludge sampling is used to demonstrate compliance, submit a complete report of sewage sludge sampling and documentation of ongoing incinerator operating parameters indicating that the incinerator has met, and will continue to meet the mercury NESHAP emission rate limit. E.5. Dispersion Factor. Dispersion factor, in micrograms/cubic meter per gram/second: b. Name and type of dispersion model: \_\_

Submit a copy of the modeling results and supporting documentation with this application.

	a.	Control efficiency, in hundreds	hs, for the following poll	utants:		Ġ.	
		Arsenic:	Chromium:	Nickel:			
		Cadmium: Lea	d:			12	
	b.	Submit a copy of the results o	r performance testing ar	nd supporting documentation (includ	ling testing dates) with the	nis application.	
E.7.	Ris	k Specific Concentration for (	Chromium.				
	a.	Risk specific concentration (R	SC) used for chromium,	, in micrograms per cubic meter:		129	
	b.	Which basis was used to dete	rmine the RSC?		10		
		Table 2 in 40 CFR 503.4	3				
		Equation 6 in 40 CFR 50	3,43 (site-specific deterr	mination)			
	c.	If Table 2 was used, identify the	ne type of incinerator use	ed as the basis:			= 14
		Fluidized bed with wet so	rubber		5		
		Fluidized bed with wet so	rubber and wet electros	tatic precipitator	•		
		Other types with wet scru		Ala ana siatatan			
		Other types with wet scru	ibber and wet electrosta	ttic precipitator			
	d.	If Equation 6 was used, provid	e the following:				
		Decimal fraction of hexavalent	chromium concentration	n to total chromium concentration in	stack exit gas:		2
		Submit results of incinerator s	tack tests for hexavalen	t and total chromium concentrations	s, including date(s) of tes	st, with this applica	ition.
E.8.	Inci a.	nerator Parameters  Do you monitor Total Hydroca	rbons (THC) in the sewa	age sludge incinerator's exit gas?	Yes	No	
		Do you monitor Carbon Monox	ide (CO) in the sewage	sludge incinerator's exit gas?	Yes	No	87
	b.	Incinerator type:			*		
	c.	Incinerator stack height, in me	ters:	10-			
		Indicate whether value submitt	ed is: Actual sta	ack height Cre	editable stack height		
E.9.	Peri	formance Test Operating Para	meters	9	35		i
	a.	Maximum Performance Test C	ombustion Temperature	):			
	b.	Performance test sewage slud	ge feed rate, in dry metr	ic tons/day:	24		
		indicate whether value submitte	ed is:				Œ
		Average use	Maximum desig	gn			
		Submit, with this application, se	upporting documents de	escribing how the feed rate was calc	culated.		
	C.	Submit, with this application, in this sewage sludge incinerator.		the performance test operating para	ameters for the air pollut	ion control device(	s) used for

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ê	a.	Total hydrocarbons or carbon monoxide:	
t	b.	Percent oxygen:	=:
c	c.	Moisture content:	<b>=</b> 23
		Combustion temperature:	
C	u.	Companion temperature.	
	а. e.	Other:	
e 11. <i>A</i>	e. Air i	Other:  Pollution Control Equipment. Submit, with this application, a list of all air pollution control equipment used with this s	– sewage sludǫ
e 1. <i>A</i>	e. Air i	Other:	– sewage sludç
e 1. <i>A</i>	e. Air i	Other:  Pollution Control Equipment. Submit, with this application, a list of all air pollution control equipment used with this s	– sewage sludç
e 11. <i>A</i>	e. Air i	Other:  Pollution Control Equipment. Submit, with this application, a list of all air pollution control equipment used with this sperator.	– sewage sludo

# Appendix A

**Biomonitoring Test Data** 

North Shore Sanitary District

Post Office Box 750, Wm. Koepsel Dr., Gurnee, Illinois 60031 847/623-6060 FAX 847/623-3205 TDD 847/623-6091



**BOARD OF TRUSTEES** 

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SECRETARY MARY JO BRYANT ATTORNEY GREGORY T. JACKSON

February 16, 2010

Mr. Joseph Slevnik City of Naperville P.O. Box 3020 Naperville, IL 60566

Dear Mr. Slevnik:

Whole effluent sample was collected at the Springbrook Water Reclamation Center WWTP, NPDES permit No. IL0034061, February 2, 2010 for Whole Effluent Toxicity (WET) analysis. The effluent sample and receiving stream control were delivered on the same day, by City of Naperville personnel, to the laboratory at the North Shore Sanitary District (NSSD),

The Springbrook Water Reclamation District is located at 3712 Plainfield/Naperville Road, Naperville, IL and the receiving water body is the DuPage River.

The requested analysis is 48 hour, acute invertebrate testing using Ceriodaphnia dubia and 96 hour, acute vertebrate testing using fathead minnows. 'All testing was performed at the NSSD laboratory according to procedures outlined in the NSSD Quality Assurance Manual and EPA/821-R-02-012.

There were no deviations from the referenced method.

The following is a brief summary of the results.

- The 48 hour invertebrate test using Ceriodaphnia dubia resulted in 90 percent survival of test organisms in whole effluent indicating no apparent acute toxicity.
- The 96 hour fish testing using fathead minnows (Pimephales promelas) resulted in 100 percent survival of test organisms in whole effluent indicating no apparent acute toxicity.

The results of these tests show that the City of Naperville/Springbrook Water Reclamation Center Whole Effluent collected on February 2, 2010 exhibited no acute toxicity to either test species.

Please feel free to call if you have questions.

Sincerely,

Robert Flood Aquatic Biologist

NORTH SHORE SANITARY DISTRICT

RF:mjb

cc:

Lab Billing File Bio Lab File

port Llevel

### BIOMONITORING CHAIN OF CUSTODY FORM North Shore Sanitary District P.O. BOX 750 Wm. Koepsel Dr. Gurnec, IL 60031 (847) 623-6060 PERVILLE Client Name: P.O. BOX 3020, Address Phone Contact Person: 0034061 Permit Number: IL RECLAMATION CENTER, 3712 Plaintield NAPERVILLE Rd, NAPERVILLE, IL Plant Location: JPRINGBROOK Mean Daily Discharge on Sample Collection Date: 24. Biomanitoring - Acute Toxicity Testing Requirements: a) Fish-96 hr STATIC LC50 BIOASSAY - FLATHEAD MINHOW 6) INVERTEBRATE-48 Hr STATIC LC50 Bloassay - CERJGDAPH nia Name of Receiving Water Body: **Effluent Samples** Sample Collector (Print): JOSEPH LEVNIK Signature: alu Sample Number Sample Point Type of Sample (Grab or Composite) Collection Date/Time 24 hr Composite (12x) OMPOSITE hour ischarge M1 Receiving Water Samples SLEVNIK Signature: Sample Collector (Print): JOSEPH Sample Number Sample Point Type of Sample (Grab or Composite) Collection Date/Time Dupage River IRIB-09 02-02-10 GRAB Discharge Relinquished By: Received By: Date/Time Date/Time 02-02-10 Received for Laboratory By: Dispatched By: Method of Shipment: 7.8°C Effluent Sample Temperature on Receipt: Receiving Water Temperature on Receipt: Lapsed Time from Sample Collection to Delivery at the Laboratory: 10 hr 15 min Test Started, Date/Time: Lapsed Time from Sample Collection to Test Started:

# Whole Effluent Toxicity Reporting: Source of Effluent and Receiving Water

### **EFFLUENT SAMPLE**

Sampling Point:

Sample Collection Method: Collection Dates and Times:

Mean Daily Discharge on the Sample Collection Date: Lapsed Time From Sample Collection to Delivery:

Lapsed Time From Sample Collection to Analysis Begins: Sample Temperature When Received at the Laboratory:

City of Naperville

Springbrook Water Reclamation

Center

24-hour composite 2/1-2/10 2400-2400

24.629 MGD

10 hours 15 minutes 14 hours 45 minutes

2.8 deg C (transported on wet ice)

#### RECEIVING WATER SAMPLE

Sampling Point:

Sample Collection Method: Collection Dates and Times:

Sample Temperature When Received at the Laboratory:

Du Page River

Grab

2/2/10 @ 0805

0.1 deg C

# North Shore Sanitary District Biomonitoring Laboratory Standard Testing Protocols for:

## The Ceriodaphnia dubia 48 hr. Acute Toxicity Test

1. Test Type:	Static non-renewal
2. Test Duration:	48 hours
3. Test Chamber:	30 ml polystyrene cup
4. Test Solution Volume:	20 ml
5. Age of Test Organism:	juvenile, < 24 hours old ( 24 hour hatching window )
6. Number of Organisms per Test Chamber:	5
7. Number of Replicates per Concentration:	4
8. Number of Organisms per Concentration:	20
9. Feeding Regime:	Fed <u>Selenastrum</u> algae daily (Approx. 4.2 * 10 <sup>5</sup> cells/ml in the culture vessel) and YCT
10. Culturing Temperature:	25.0 C +/- 1.0 C
11. Testing Temperature:	25.0 C +/- 1.0 C
12. Test Organism Source:	In house cultures obtained from USEPA Newtown, Ohio
!3. End Point of Test:	Death, immotility
14. Test Acceptability Criterion:	90% or greater survival in the controls
15. Sample Holding Time:	36 hrs. after completion of sampling



### <u>Ceriodaphnia dubia</u> Acute Toxicity Test Data Summary Sheet

Discharger: City of Naperville Springbrook Water Reclamation Center

3712 Plainfield/Naperville Road

Naperville, IL 60564

Permit Number: IL0034061

Sample Date: February 1-2, 2010 @ 2400 - 2400

Sample Type: 24 Hour Composite

Analysis Dates: February 2, 2010 @ 1445 - February 4, 2010 @ 1525

Test Organism: Ceriodaphnia dubia <24 hours old, 24 hour hatching window

Test Organism Source: In house cultures

**Test Duration: 48 hours** 

**Deviations from Standard Testing Protocol: None** 

							and the same of th
Treatment	Receiving Stream Control	6.25% Effl.	12.5% Effl.	25% Effi.	50% Effi.	100% Effi.	Lab Control
Number of live organisms:	20 of 20	19 of 20	20 of 20	20 of 20	20 of 20	18 of 20	20 of 20
Survival (%):	100	95	100	100	100	90	100
pH:	7.9 - 8.4	7.9 - 8.4	7.9 - 8.4	7.9 - 8.5	7.9 - 8.5	7.9 - 8.5	8.2 - 8.6
Temp. Range (degrees C):	24.2 - 24.6 mean =24.4	24.1 - 25.1 mean =24.6	24.0 - 25.2 mean =24.6	24.0 - 25.1 mean =24.6	23.9 - 25.0 mean =24.6	24.0 - 24.7 mean =24.4	24.3 - 24.7 mean =24.5
Dissolved Oxygen (mg/l):	7.4 - 9.4	7.4 - 9.2	7.2 - 9.3	7.4 - 9.1	7.4 - 9.0	7.2 - 8.6	7.5 - 7.8
Conductivity (umhos):	1483	1476	1461	1419	1365	1227	341
Hardness (mg/l as CaCO3):	412	-	_	=	=	339	=
Total Alkalinity mg/l as CaCO3):	255	_	_		-	217	=
Ammonia litrogen (mg/l):	0.14	-	-	_	_	0.45	-
otal Residual hlorine (mg/l):	-	-	-	-	-	<0.1	-

### North Shore Sanitary District **Biomonitoring Laboratory** Standard Testing Protocols for:

# The Fathead Minnow (Pimephales promelas) 96 hr. Acute Toxicity Test

1. Test Type:	Static-renewal
2. Test Duration:	96 hours
3. Test Chamber:	600 ml glass beaker
4. Test Solution Volume:	300 ml
5. Age of Test Organism:	larvae, 1-14 days old (24 hr hatching window)
6. Number of Organisms per Test Chamber:	10
7. Number of Replicates per Concentration:	2
8. Number of Organisms per Concentration:	20
9. Feeding Regime:	Before testing, daily feeding of <u>Artemia</u> nauplii in an amount sufficient to provide a slight excess 1 hour after feeding. Feed 2 hrs. prior to test solution renewal at 48hrs.
10. Culturing Temperature:	25.0 C +/- 1.0 C
11. Testing Temperature:	25.0 C +/- 1.0 C
12. Test Organism Source:	In house cultures obtained from USEPA Newtown, Ohio
!3. End Point of Test:	Death, immotility
14. Test Acceptability Criterion:	90% or greater survival in the controls
15. Sample Holding Time:	36 hrs. after completion of sampling



# Fathead Minnow ( <u>Pimephales promelas</u> ) Acute Toxicity Test Data Summary Sheet

Discharger: City of Naperville Springbrook Water Reclamation Center

3712 Plainfield/Naperville Road

Naperville, IL 60564

Permit Number: IL0034061

Sample Date: February 1-2, 2010 @ 2400 - 2400

Sample Type: 24 Hour Composite

Analysis Dates: February 2, 2010 @ 1245 - February 6, 2010 @ 1300 Test Organism: Fathead Minnow 14 days old, 24 hour hatching window

Test Organism Source: In house cultures

Test Duration: 96 hours

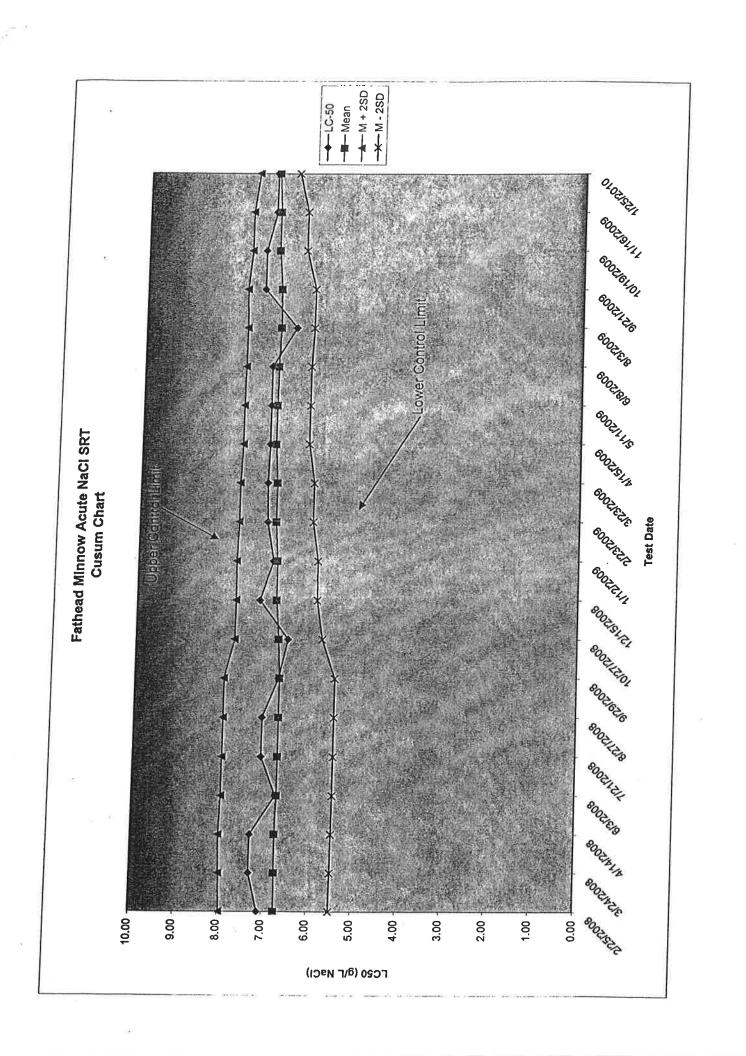
**Deviations from Standard Testing Protocol: None** 

A second	N VX						
Treatment	Receiving Stream Control	6.25% Effl.	12.5% Effl.	25% Effl.	50% Effi.	100% Effi.	Lab Control
Number of live organisms:	20 of 20	20 of 20	20 of 20	20 of 20	20 of 20	20 of 20	20 of 20
Survival (%):	100	100	100	100	100	100	100
pH:	7.9 - 8.4	7.9 - 8.5	7.9 - 8.5	7.9 - 8.5	7.9 - 8.5	7.9 - 8.4	7.9 - 8.5
Temp. Range (degrees C):	24.6 - 25.3 mean =25.0	24.6 - 25.2 mean =25.0	24.5 - 25.2 mean =24.9	24.3 - 25.1 mean =24.8	24.5 - 25.1 mean =24.8	24.3 - 24.8 mean =24.7	24.6 - 25.4 mean =24.9
Dissolved Oxygen (mg/l):	6.7 - 9.4	6.7 - 9.2	6.7 - 9.3	6.8 - 9.1	6.9 - 9.0	6.8 - 8.6	6.7 - 7.8
Conductivity (umhos):	1483 - 1513	1476 - 1497	1461 - 1482	1419 - 1439	1365 - 1388	1227 - 1254	341 - 371
Hardness (mg/l as CaCO3):	412	~	- /		-	339	_
Total Alkalinity mg/l as CaCO3):	255	-	-	-	-	217	-
Ammonia Nitrogen (mg/l):	0.14	_	-	-	_	0.45	_
otal Residual Chlorine (mg/l):	-		( <del>=</del> )	-	-	<0.1	n—:

## Quality Assurance Standard Reference Toxicity Testing

# Fathead Minnow (Pimephales promelas) 96 hr. Acute SRT

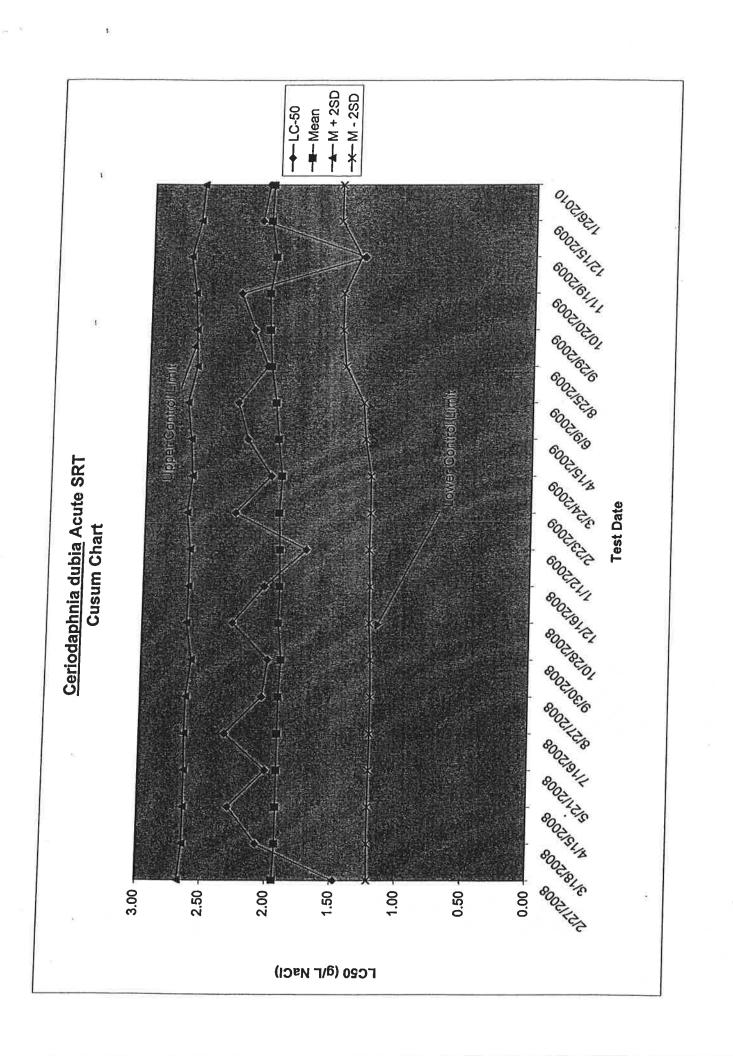
Reference Toxicant:	Sodium chloride (NaCl)
Source:	Fisher Scientific
Date Received:	10/22/03
Lot Number:	035425
Dilution Water:	Laboratory Culture Water
Methods:	Same as listed under Standard Testing Protocols for The Fathead Minnow 96 hr. Acute Toxicity Test
Most Recent Test:	1/25/2010
Test Results:	LC 50 = 7.10 g/l NaCl Upper Control Chart Limit = 7.51 Lower Control Chart Limit = 6.60 see attached cusum chart



## Quality Assurance Standard Reference Toxicity Testing

# Ceriodaphnia dubia 48 hr. Acute SRT

Reference Toxicant:	Sodium chloride (NaCl)
Source:	Fisher Scientific
Date Received:	10/22/03
Lot Number:	035425
Dilution Water:	Laboratory Culture Water
Methods:	Same as listed under Standard Testing Protocols for The Ceriodaphnia dubia 48 hr. Acute Toxicity Test
Most Recent Test:	1/26/2010
Test Results:	LC 50 = 2.10 g/l NaCl Upper Control Chart Limit = 2.61 Lower Control Chart Limit = 1.53 see attached cusum chart



Client Name: Na perville Person Conducting Test: Name: Na perville Person Conducting Test: Name: 1445

Sample Number: Test Start Date: 2/2/10 Time: 1445

Sample Date: Acote Static 2/2/10 Test End Date: 2/4/10 Time: 1525

Test Type: Acote Static Dilution Water Used: Rec. Stream

Age of Neonates: 424hrs. Hatching Window: 424hrs.

Feeding: Led Selenastrom Algae and 4CT prior to testing

Test Vessel Size: 30ml Test Solution Volume: 20ml

Sample Treatment?: Stained through 63 un plant for net

	*			
Concentration or % Effluent	Test Vessel Number	Number of Living Organisms		
	Maniper	0 hrs	24 hrs	48 hrs
Rec Stream	14-1	5	5	5
	5-1	5	5	5
Control	6-1	1.5	5	5
	7-1	5.	5	5
	4-2	5	5	5
6.25	5-2	5	5	5
0.27	6-2	5	5	5
	7-2	5	5	4
¥	4-3	5	5	<
12.5	5-3	5	5	5
	6-3	5	5	5
	7-3	5	5	5
	4-4	The second secon	5	5
25	5-4	5	5	5
<i>( )</i>	6-4	2	5	5
-1	7-4	5	5	5
#				

Concentration or % Effluent	Test Vessel	Number of Living Organisms			
	Number	0 hrs	24 hrs	48 hrs	
	4-5	5	5	5	
50	5-5	5	5	45	
	6~5	5	5	5	
	7-5	5	5	5	
7.51	4-6	5	4	4	
100	5-6	5	5	4	
(00	6-6	5	5	5	
	7-6	5	5	5	
Lab	4-7	<	5	-	
Lab Control	5-7	. <	5.	7	
Control	6-7	5	5	<u> </u>	
	7-7	5	5	5	
		, , , , , , , , , , , , , , , , , , ,			
				*	
, a				(4) 39)	
		*		,	

ni	tia	ls:

) hrs= Nl	24 hrs= orl	48 hrs=_	W
the second second			

omments:	

# Ceriodaphnia dubia Acute toxicity Testing Chemistry Data Client Name: 仏なperいまま

Test Start Date: 2/2/10

Sample Date: 2/2/10



	1	nor Sterm								
Parameter	Time	15 to	707	121	Concentra	Concentration, % Effluent	uent			
		5	î	16-3	2.5	29	100	Lab Cantril		
Dissolved	Initial	4.4	2.6	9.3	9.1	00	0			
Oxygen	24 hrs						6	a :		
a d	1/-						2	10	12	
(mg/l)	48 hrs	7.0	7.4	7.7	7.4	7.4	7.1	1,2	2	
Hd	Initial	7.9	7.9	7.9	2.0	7.9	19	o c		
(units)	24 hrs				=			1 5	N	
	48 hrs	178	7.00	7	2.5	Q Q	0	000		
Temp	Initial	246	126	250	120	7,00	0.00	9 1		1
·			1777	1	1.74	2.67	1.42	7 47		
(Cent)	24 hrs			- All		4	# 19	54:		24
	48 hrs	24.2	1.752	24.0	240	729	240 042	277		
Cond	Initial	1483	941	19,5/		T	L221	341		
(micromhos)		±1			2					
NH3 (mg/l)	Initial	0.14			٠		ShO			
T. Cl2 (mg/l)	Initial	2								
Alk (mg/l)	Initial	255	٠	2			7.12			
Hard (mg/l)	Initial	7214					339			

24 hr Initial

Fathead Minnow (Pimephales promelas) Acute Toxicity Testing - Mortality Data

	5 mortality Data
Client Name: Naperville	Person Conducting Test:
Sample Number:	Test Start Date: 1245
Sample Date: 2/2/10	Test End Date: 2/6/10 Time: 13:00
Test Type: Acute - Static Feneral	Dilution Water Used: Pec Stream
Age of Fish: 14 days old	Hatching Window: 24 hrs.
Feeding: Fed newly hatched brine shrim	pprior to testing and at 46 45
Aeration: None	
Test Vessel Size: 600ml	Test Solution Volume: 300 m /
Sample Transmont 2 Ct	m / // F

Concentration	Test Vessel		lumber o	f Living (	Organism	s
or % Effluent	Number	0 hrs	24 hrs	48 hrs	72 hrs	96hrs
Rec. Stream	\	16	10	10	10	10
Control	2	10	10	10	10	10
6.25	3	10	10	10	10	18
0.2>	4	10	10	10	10	10
17 <		10	10	10	10	10
12-5	6	10	10	10	10	10.
25	. 7	10	.(0.	10	10	10
23	8	10	10	10	10	10
50	9	10	10	10	10	10
30	lo	10	10	10	10	10
100	U	10	[0	10	10	10
	12	10	10	10	10	10
Lab	13	10	10	10	10	10
Control	14	10	10	10	.10	10

# Initials:

O hrs= he 24 hrs- hy 10 h-- 11

Fathead Minnow (Pimephales promelas) Acute toxicity Testing Chemistry Data Sample Number: Client Name: Naparvilla

Sample Date: 7/2/10

Test Start Date: 2/2/10



						ž	12	¥		
	*	Rec. Strain			Concentr	Concentration % Ext				
Farameter	Time	Contro!	6.75	7	7,0	ation, % E	muent			· c
	Initial	1.0	,	15.	52	20	00	Lab Pontal	-	Ī
	пшпаг	7.4	2.7	9.3 E.	0	0	20	lo dun or a		30
Dissolved	24 hrs	7.5	1-1	71	100	أزا	o a	20.		
Oxygen	48 hrs	7.9	111	9	7.0	7:1	7.5	<u> </u>		
(l/gm)	72 hrs	7.0	7.	- (C	100	ğ	$\omega_{\sim}$	7.8		
	96 hrs	6.7	7 7	- ' '	(,0	7.1	0.0	0.6	-	
	Initial	20,0	10	j.e.	8.0	6.9		L. 67		
Ha	24 hrs	70	9	5 6	5	7.9	7.9	8.7		
(units)	48 bre	00	r Šč	) <u>a</u>	9	8	8.2	& €	-	
		200	2,0	3.5	8.02	9,7	99	79		
	72 hrs	2:6	78.4	7.8	700	4.8	778	\ \ \ \	-	
	96 hrs	d .	90	8.5	R.S	0	77.0	100	1	
	Initial	24.6	25.1	252	126	200	1000	7.00		
Temp	24 hrs	25.0	757	200	11:10	27.5	1-67	L.h7		
(top)	40 has	200	コニア	7.57	24.20	757	24-8	25.4	2	
(Cellity)	#0 III.s	0.7.2	947	575	8,75	24.6	8.72	7.72		
80	72 hrs	25.	35.	24.7	24.3	34.5	2 1/2	756		
	96 hrs	25.7	75.1	156	25.0	26.0	246	100	+	Ī.
Cond	Initial	1483	9661	1961	14/9	176<	1777	17/6		
(micromhos)	48 hrs	(5/3.	L6h1	1497	10201	1200	1001	750		
NH3 (mg/l)	Initial	2			1721	22/2	657/	37/		
T Cl2 (mg/l)	Initial	5					0.45			
All: /	IIIIII					s				
AIK (IIIg/I)	Initial	255					213		$\dagger$	
Hard (mg/l)	Initial	715					220	-	1	T
Initials:	Leitiol	0.7 hr	70 F.	. 32			>><			
	3	∃. 7	48 nr	/2 hr	96 hr	<u> </u>				

NORTH SHORE SANITARY DISTRICT

POST OFFICE BOX 750, Wm. KOEPSEL DR., GURNEE, ILLINOIS 60031 847/623-6060 FAX 847/623-3205 TDD 847/623-6091



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November 10, 2009

Mr. Joseph Slevnik City of Naperville P.O. Box 3020 Naperville, IL 60566

Dear Mr. Slevnik:

Whole effluent sample was collected at the Springbrook Water Reclamation Center WWTP, NPDES permit No. IL0034061, November 3, 2009 for Whole Effluent Toxicity (WET) analysis. The effluent sample and receiving stream control were delivered on the same day, by City of Naperville personnel, to the laboratory at the North Shore Sanitary District (NSSD).

The Springbrook Water Reclamation District is located at 3712 Plainfield/Naperville Road, Naperville, IL and the receiving water body is the DuPage River.

The requested analysis is 48 hour, acute invertebrate testing using <u>Ceriodaphnia dubia</u> and 96 hour, acute vertebrate testing using fathead minnows. All testing was performed at the NSSD laboratory according to procedures outlined in the NSSD Quality Assurance Manual and EPA/821-R-02-012.

There were no deviations from the referenced method.

The following is a brief summary of the results.

- 1. The 48 hour invertebrate test using <u>Ceriodaphnia dubia</u> resulted in 95 percent survival of test organisms in whole effluent indicating no apparent acute toxicity.
- 2. The 96 hour fish testing using fathead minnows (<u>Pimephales promelas</u>) resulted in 95 percent survival of test organisms in whole effluent indicating no apparent acute toxicity.

The results of these tests show that the City of Naperville/Springbrook Water Reclamation Center Whole Effluent collected on November 3, 2009 exhibited no acute toxicity to either test species.

Please feel free to call if you have questions.

Sincerely,

Robert Flood
Aquatic Biologist

NORTH SHORE SANITARY DISTRICT

RF:mjb

cc:

Lab Billing File Bio Lab File

#### BIOMONITORING CHAIN OF CUSTODY FORM North Shore Sanitary District. P.O. BOX 750 Wm. Koepsel Dr. Gurnee, IL 60031 PERVILLE (847) 623-6060 Client Name: P.O. Box 3020, NAPERVILLE, Address JOSEPH Phone Contact Person: Permit Number: Plant Location: SPRINGBrook WATER RECLAMATION CENTER, 3712 PLAINTHEAD/NAPERBLE Rd, NAPERVILLE, IL Mean Daily Discharge on Sample Collection Date: BIOMONITORING-ACUTE TOXICITY Testing Requirements: a) FISH-96hr STATIC LCSO BIOASSAY-FLATHEAD MINNOW b) INVERTEBRATE- 48hr STATIC LCSO Blokssay\_CERTODAPhnia RIVER Name of Receiving Water Body: **Effluent Samples** Sample Collector (Print): JOSEPH Signature: Sample Number Sample Point Collection Date/Time Composite (24 Hour) ischanae 001 Receiving Water Samples Sample Collector (Print): JOSEPH SLEVNIK Signature: Sample Number Sample Point Type of Sample (Grab or Composite) Collection Date/Time DUPAGE RNOR 07:55 am. GRAB upstream of Discharge Relinquished By: Date/Time Date/Time Received By: Dispatched By: Received for Laboratory By: Method of Shipment: 4.1 °C Effluent Sample Temperature on Receipt: Receiving Water Temperature on Receipt: 10 hrs 30min Lapsed Time from Sample Collection to Delivery at the Laboratory: Test Started, Date/Time:

36

Lapsed Time from Sample Collection to Test Started:

# Whole Effluent Toxicity Reporting: Source of Effluent and Receiving Water

#### **EFFLUENT SAMPLE**

Sampling Point:

Sample Collection Method:
Collection Dates and Times:
Mean Daily Discharge on the Sample Collection Date:
Lapsed Time From Sample Collection to Delivery:
Lapsed Time From Sample Collection to Analysis Begins

Lapsed Time From Sample Collection to Delivery:

Lapsed Time From Sample Collection to Analysis Begins:

Sample Temperature When Received at the Laboratory:

4.1

City of Naperville

Springbrook Water Reclamation

Center

24-hour composite 11/2-3/09 2400-2400

25.522 MGD

10 hours 30 minutes

36 hours

4.1 deg C (transported on wet ice)

#### RECEIVING WATER SAMPLE

Sampling Point:
Sample Collection Method:
Collection Dates and Times:
Sample Temperature When Recei

Sample Temperature When Received at the Laboratory:

Du Page River Grab 11/3/09 @ 0755 5.2 deg C

#### North Shore Sanitary District Biomonitoring Laboratory Standard Testing Protocols for:

# The Ceriodaphnia dubia 48 hr. Acute Toxicity Test

1. Test Type:	Static non-renewal
2. Test Duration:	48 hours
3. Test Chamber:	30 ml polystyrene cup
4. Test Solution Volume:	20 ml
5. Age of Test Organism:	juvenile, < 24 hours old ( 24 hour hatching window )
6. Number of Organisms per Test Chamber:	5
7. Number of Replicates per Concentration:	# <b>4</b> <sub>22</sub>
8. Number of Organisms per Concentration:	20
9. Feeding Regime:	Fed <u>Selenastrum</u> algae daily (Approx. 4.2 * 10 <sup>5</sup> cells/ml in the culture vessel) and YCT
10. Culturing Temperature:	25.0 C +/- 1.0 C
11. Testing Temperature:	25.0 C +/- 1.0 C
12. Test Organism Source:	In house cultures obtained from USEPA Newtown, Ohio
!3. End Point of Test:	Death, immotility
14. Test Acceptability Criterion:	90% or greater survival in the controls
15. Sample Holding Time:	36 hrs. after completion of sampling



#### <u>Ceriodaphnia dubia</u> Acute Toxicity Test Data Summary Sheet

Discharger: City of Naperville Springbrook Water Reclamation Center

3712 Plainfield/Naperville Road

Naperville, IL 60564

Permit Number: IL0034061

Sample Date: November 2-3, 2009 @ 2400 - 2400

Sample Type: 24 Hour Composite

Analysis Dates: November 4, 2009 @ 1100 - November 6, 2009 @ 0945

Test Organism: Ceriodaphnia dubia <24 hours old, 24 hour hatching window

Test Organism Source: In house cultures

**Test Duration: 48 hours** 

**Deviations from Standard Testing Protocol: None** 

VVIVE (4.14) (5.14)	Annual Control of the			P1 (2) (a)		G G G G G G G G G G G G G G G G G G G	
Treatment	Receiving Stream Control	6.25% Effl.	12.5% Effl.	25% Effl.	50% Effi.	100% Effi.	Lab Control
Number of live organisms:	20 of 20	20 of 20	19 of 20	18 of 20	18 of 20	19 of 20	19 of 20
Survival (%):	100	100	95	90	90	95	95
рН :	7.7 - 8.5	7.7 - 8.5	7.7 - 8.6	7.7 - 8.6	7.7 - 8.6	7.6 - 8.5	7.8 - 8.5
Temp. Range (degrees C):	24.2 - 24.3 mean =24.2	24.3 - 24.4 mean =24.4	24.3 - 24.6 mean =24.4	24.4 - 24.7 mean =24.6	24.3 - 24.8 mean =24.6	24.3 - 25.2 mean =24.8	24.3 - 24.4 mean =24.4
Dissolved Oxygen (mg/l):	7.8 - 8.7	7.7 - 8.4	7.8 - 8.4	7.7 - 8.3	7.6 - 8.3	7.5 - 8.3	7.6 - 7.7
Conductivity umhos):	898	906	917	931	968	1054	309
lardness (mg/l s CaCO3):	291	-	-	- '	_	309	-
otal Alkalinity mg/l as CaCO3):	204	: * : <u>-</u> :	_	_		202	_
mmonia litrogen (mg/l):	0.19	-	-	_	-	0.19	_
otal Residual hiorine (mg/l):	-	_	-	10-70-1	.=	<0.1	_

#### North Shore Sanitary District Biomonitoring Laboratory Standard Testing Protocols for:

# The Fathead Minnow (Pimephales promelas) 96 hr. Acute Toxicity Test

1. Test Type:	Static-renewal
2. Test Duration:	96 hours
3. Test Chamber:	600 ml glass beaker
4. Test Solution Volume:	300 ml
5. Age of Test Organism:	larvae, 1-14 days old (24 hr hatching window)
6. Number of Organisms per Test Chamber:	10
7. Number of Replicates per Concentration:	2
8. Number of Organisms per Concentration:	20
9. Feeding Regime:	Before testing, daily feeding of <u>Artemia</u> nauplii in an amount sufficient to provide slight excess 1 hour after feeding. Feed 2 hrs. prior to test solution renewal at 48hrs.
10. Culturing Temperature:	25.0 C +/- 1.0 C
11. Testing Temperature:	25.0 C +/- 1.0 C
12. Test Organism Source:	In house cultures obtained from USEPA Newtown, Ohio
!3. End Point of Test:	Death, immotility
14. Test Acceptability Criterion:	90% or greater survival in the controls
15. Sample Holding Time:	36 hrs. after completion of sampling

a



# Fathead Minnow ( <u>Pimephales promelas</u> ) Acute Toxicity Test Data Summary Sheet

Discharger: City of Naperville Springbrook Water Reclamation Center

3712 Plainfield/Naperville Road

Naperville, IL 60564

Permit Number: IL0034061

Sample Date: November 2-3, 2009 @ 2400 - 2400

Sample Type: 24 Hour Composite

Analysis Dates: November 4, 2009 @ 1200 - November 8, 2009 @ 1230 Test Organism: Fathead Minnow 12 days old, 24 hour hatching window

**Test Organism Source:** In house cultures

**Test Duration: 96 hours** 

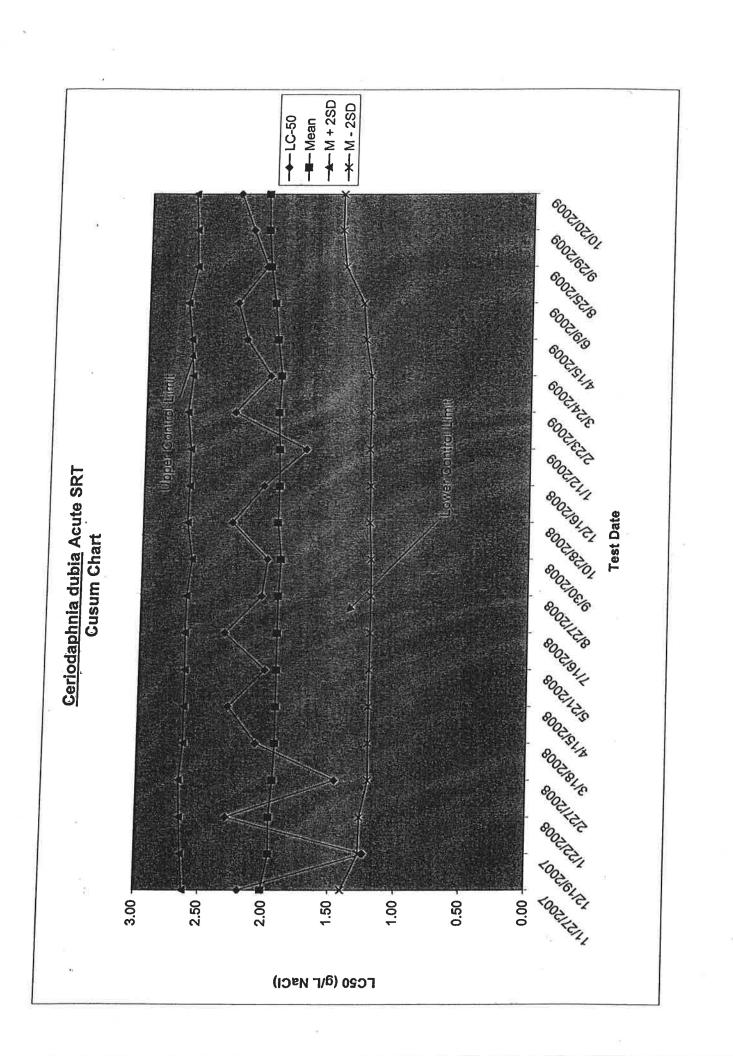
**Deviations from Standard Testing Protocol: None** 

	Receiving	T	T **	Т'''		T	T
Treatment	Stream Control	6.25% Effi.	12.5% Effl.	25% Effi.	50% Effl.	100% Effl.	Lab Control
Number of live organisms:	20 of 20	19 of 20	20 of 20				
Survival (%):	100	100	100	100	100	95	100
pH:	7.7 - 8.2	7.7 - 8.3	7.7 - 8.4	7.7 - 8.4	7.7 - 8.4	7.6 - 8.4	7.8 - 8.7
Temp. Range (degrees C):	24.2 - 25.1 mean =24.8	24.0 - 25.1 mean =24.6	24.5 - 25.1 mean =24.7	24.3 - 25.2 mean =24.7	24.0 - 24.8 mean =24.3	23.9 - 25.2 mean =24.4	24.2 - 24.9 mean =24.4
Dissolved Oxygen (mg/l):	6.6 - 8.7	6.6 - 8.4	6.7 - 8.4	6.6 - 8.5	6.4 - 8.3	6.3 - 8.3	6.4 - 7.9
Conductivity (umhos):	898 - 918	906 - 927	917 - 926	931 - 958	968 - 994	1054 - 1067	309 - 312
Hardness (mg/l as CaCO3):	291	-	.—.:	(1	_	309	_
otal Alkalinity mg/l as CaCO3):	204	-	_ 8	-	-	202	-
Ammonia litrogen (mg/l):	0.19	=	_	<u>—</u>	-	0.19	· <u>-</u>
otal Residual hlorine (mg/l):	· -	-	°	-	-	<0.1	-

#### Quality Assurance Standard Reference Toxicity Testing

# Ceriodaphnia dubia 48 hr. Acute SRT

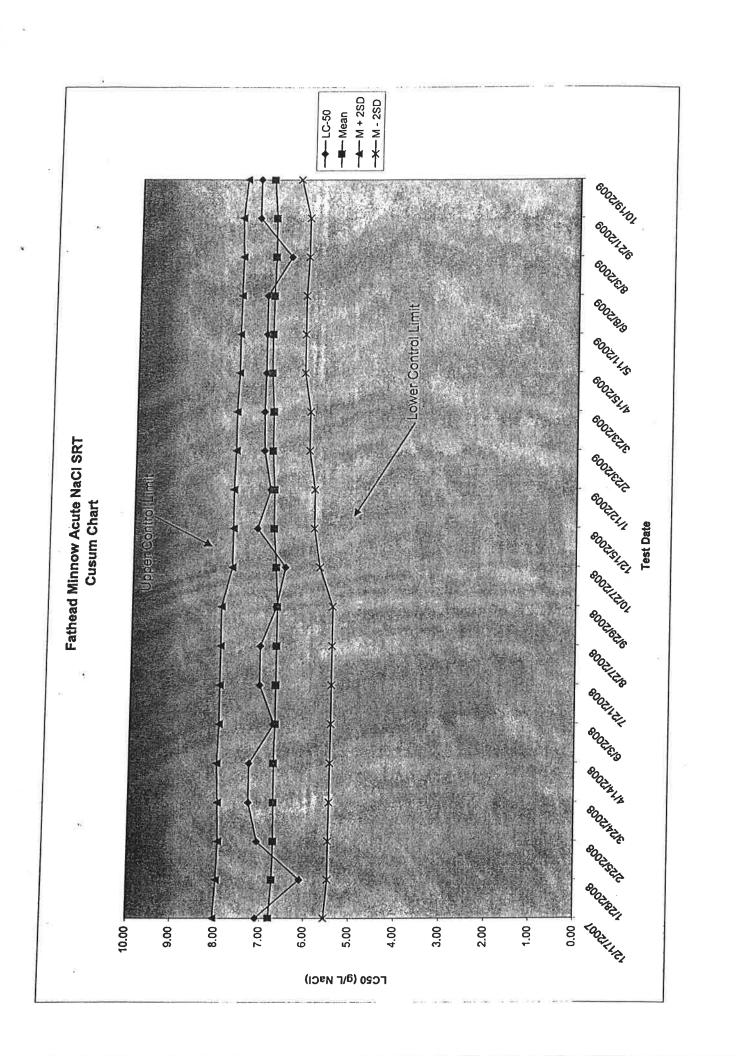
Reference Toxicant:	Sodium chloride (NaCl)
Source:	Fisher Scientific
Date Received:	10/22/03
	9 3
Lot Number:	035425
Dilution Water:	Laboratory Culture Water
Methods:	Same as listed under Standard Testing Protocols for The Ceriodaphnia dubia 48 hr. Acute Toxicity Test
Most Recent Test:	10/20/2009
Test Results:	LC 50 = 2.30 g/l NaCl Upper Control Chart Limit = 2.66 Lower Control Chart Limit = 1.50 see attached cusum chart



#### Quality Assurance Standard Reference Toxicity Testing

# Fathead Minnow (Pimephales promelas) 96 hr. Acute SRT

Reference Toxicant:	Sodium chloride (NaCl)
Source:	Fisher Scientific
Date Received:	10/22/03
Lot Number:	035425
Dilution Water:	Laboratory Culture Water
Methods:	Same as listed under Standard Testing Protocols for The Fathead Minnow 96 hr. Acute Toxicity Test
Most Recent Test:	10/19/2009
Test Results:	LC 50 = 7.31 g/l NaCl Upper Control Chart Limit = 7.62 Lower Control Chart Limit = 6.38 see attached cusum chart



# Ceriodaphnia dubia Acute Toxicity Testing - Mortality Data Client Name: Naperville Person Conducting Test: 199 Sample Number: NR09-66 Test Start Date: 11/4/09 Time: 1100 Sample Date: 11/2-3/09 Test End Date: 1/6/09 Time:0945 Test Type: Acute - Static Dilution Water Used: Rec-Stream Age of Neonates: <24 krs. Hatching Window: 224 krs. Feeding: Fed Selenastrum Algue and YCT prior to tosting Test Vessel Size: 30 m l Test Solution Volume: 20 m/ Sample Treatment ?: Sample Strained through 63 um planteton net

Concentration	Tost Versi	T		
or % Effluent	Test Vessel Number	Number	of Living	Organisms
		0 hrs	24 hrs	48 hrs
Rec. Stram	4-1	5	5	5
	5-1	5	5	5
Control	6-1	. 5	5	5
i i	7-1	5	5	5
	4-2	5	5	5
6.25	5-2	5	104 S	5
0.03	6-2	5	5	5
	7-2	5	5	5
	4-3	5	5	5
12.5	5-3	5	4	4
	6-3	5	5	5
	7-3	\$ .	5	5
*	4-4	5	5	5
25	5-4	5	4	Ÿ
<u> </u>	6-4	5	4	4
	7~4	5	5	5

Concentration or % Effluent	Test Vessel	Number	of Living	Organisms
3. 70 2	Number	0 hrs	24 hrs	48 hrs
	4-5	5	4	4
50	5-5	5	14	4
9	6-5	5	5	5
	7-5	5	5	5
2	4-6	5	5	5
10.0	5-6	5	4	4
	6 -6	5	5	5
	7-6	5	5.	5
100	4-7	5	5	5.
Lab Control	5-7	5	5	5
(ontro)	6-7	5	5	4
	7-7	5	5	<del>-</del>
-	19			<u> </u>
	*			
	•			
<u> </u>				

nitials:	1	i	t	i	a	I	s	
----------	---	---	---	---	---	---	---	--

hrs= <u>Wu</u>	24 hrs=_ml	48 hrs= ML
		10 1113-11

omments:	
)	

Ceriodaphnia dubia Acute toxicity Testing Chemistry Data Client Name: Nuptriville Sample Number: NRO9-66

Test Start Date: 11/4/09

Sample Date: 11/2-3/09



		Rec. Strange			1	70			
Parameter	Time	(2. +10)	625	5	777	2011celluration, % Efficient	uent		
		1		(1.7)	62	\$0	100	Cab Control	
Dissolved	Initial	à	T ÔC	20 2	GC .3	800	00°	7.7	
Oxygen	24 hrs		v						
(mg/l)	48 hrs	7.8	しし	7.8	7.7	7,6	7.5	1,	
Hd	Initial	し、し	ハイ	トト	イン	してい	أدر	9 8	
(units)	24 hrs						ò	02/	
	48 hrs	8.5	8,5	\$\dot{\phi}\$	2000	000	00)	V	
Тетр	Initial	24.2	243	24.6	24.7		25.2	24.3	
(Cent)	24 hrs								
	48 hrs	24.3	24.4	£-th2	24.4	24.3	24.3	7,72	
Cond	Initial	848	996	417	93.1	968	h501	309	
(micromhos)		32 - - - -	:#				×		
NH3 (mg/l)	Initial	0.19		*		·	0.19		
T. Cl2 (mg/l)	Initial						7.07		
Alk (mg/l)	Initial	407					707		
Hard (mg/l)	Initial	162	,	e			389		

<u>Initials:</u>

24 hr Initial

48 hr

Fathead Minnow (Pimephales promelas) Acute Toxicity Testing - Mortality Data Client Name: Naperville Person Conducting Test: 1/1 Sample Number: NR09-66 Test Start Date: 1/4/09 Time: 1700 Sample Date: 11/2-3/09 Test End Date: 11/6/09 Time: 1230 Test Type: Acute - static renewal Dilution Water Used: Rec Stream Age of Fish: 12 days old Hatching Window: 24 kg Feeding: Fed newly hatched brine shring prior to testing and at 46 hrs. Aeration: wone Test Vessel Size: 60m/ Test Solution Volume: 300 m /

Sample Treatment ?: Sample strained through 63 um plankton net

Concentration	Test Vessel	Number of Living Organisms					
or % Effluent	Number	0 hrs	24 hrs	48 hrs	72 hrs	96hrs	
Rec. Stream	1	10	(0	10	10	10	
Control	2	10	10	10	10	10	
6.25	3	10	(0	10	10	10	
(0-4)	4	10	10	10	10	10	
12-5	5	10	10	10	10	10	
12-3	6	(0)	(0)	10.	10	(0)	
25	. 7	10	10	10	10	10	
L 3	8	0	10	10	10	10	
50	9	10	10	10	10	10	
70	lo	(0	10	10	10	10	
100		0	10	10	10	10	
100.	12	10	10	10	10	9	
Lab	13	(0)	10	lo	10	10	
(ontrol	ιЦ	10	10	ĬŎ	10	10	

## Initials:

24 hrs= 12 48 hrs= 12 hrs= 14 96 hrs= 14

Fathead Minnow (*Pimephales promelas*) Acute toxicity Testing Chemistry Data Client Name: <u>Naparville</u> Sample Number: <u>NR 09-66</u>

Test Start Date: //

Sample Date: [1]



		Rec Strain			Concord	10 mg			
Parameter	Time	Couter	6.25	10 <	70	o c	Tiuent	er	
	Initial	3	11.0	15.7	7.7	20	00)	Lab Control	Ī
	ווווומו	ò	27	\$\ \$\dot{\dot}	83	α; Λ	00 17	11	T
Dissolved	24 hrs	٥٠/	<i>\$</i>	イ・イ	7.6	1	101	1-1	Ī
Oxygen	48 hrs	00	Ø.	\ \ \ \ \	010		51	1:6	
	70 6.2	9		700	50	à	8:7	6-6	
(1,5,11)	74 1115	0.0	- 1	ر ۈ	6.6	67	8	7/2	T
	96 hrs	468	000	6.7	66	6.4	000	20	
	Initial	۲.۲	ハ・ノ	4.7	7.7	77	2	0	1
Hd	24 hrs	7.8	7.9	0	93	0	20	0 0	T
(units)	48 hrs	- 60	~ 00	8.7	200	9 6	00	1.7	
6	72 hrs	8.2	2,8	8.7		28	2 6	7.00	Ī
4.7	96 hrs	000	30,00	200	20	2 = 0	) = Q	90	
	178.55	227	1/21	1 2 2	Ö	70	4,0	۵. /	
ı	ILIIMAI	2.1.0	24.5	9:37.	27.72	24.0	28.2	24.3	Γ
ешр	24 hrs	25.0	0,42	24.8	24.3	24.0	23.9	24.2	Ī
(Cent)	48 hrs	24.6	24.3	1246	24.4	24.3	24.3	24.4	Ī
	72 hrs	1.52	132	24.5	252	24.2	1 /2	243	
	96 hrs	25.0	1.52	1.52	25.1	24.3	744	24.9	
Cond	Initial	ଖ୍ୟନ	906	417	931	976	4201	304	T
(micromhos)	48 hrs	9/8	126	926	958	290	1001	212	T
NH3 (mg/l)	Initial	0.19					2	216	T
T. Cl2 (mg/l)	Initial								T
Alk (mg/l)	Initial	204					000		T
Hard (mg/l)	Initial	162					200		1
							202		

Initials:

72 hr 48 hr 24 hr Initial 7

96, hr

NORTH SHORE SANITARY DISTRICT

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ATTORNEY GREGORY T. JACKSON

August 19, 2009

Mr. Joseph Slevnik City of Naperville P.O. Box 3020 Naperville, IL 60566

Dear Mr. Slevnik:

Whole effluent sample was collected at the Springbrook Water Reclamation Center WWTP, NPDES permit No. IL0034061, August 10, 2009 for Whole Effluent Toxicity (WET) analysis. The effluent sample and receiving stream control were delivered on the same day, by City of Naperville personnel, to the laboratory at the North Shore Sanitary District (NSSD).

The Springbrook Water Reclamation District is located at 3712 Plainfield/Naperville Road, Naperville, IL and the receiving water body is the DuPage River.

The requested analysis is 48 hour, acute invertebrate testing using <u>Ceriodaphnia dubia</u> and 96 hour, acute vertebrate testing using fathead minnows. All testing was performed at the NSSD laboratory according to procedures outlined in the NSSD Quality Assurance Manual and EPA/821-R-02-012.

There were no deviations from the referenced method.

The following is a brief summary of the results.

- 1. The 48 hour invertebrate test using <u>Ceriodaphnia dubia</u> resulted in 95 percent survival of test organisms in whole effluent indicating no apparent acute toxicity.
- 2. The 96 hour fish testing using fathead minnows (<u>Pimephales promelas</u>) resulted in 100 percent survival of test organisms in whole effluent indicating no apparent acute toxicity.

The results of these tests show that the City of Naperville/Springbrook Water Reclamation Center Whole Effluent collected on August 10, 2009 exhibited no acute toxicity to either test species.

Please feel free to call if you have questions.

Sincerely,

Robert Flood Aquatic Biologist

NORTH SHORE SANITARY DISTRICT

RF:mib

cc:

Lab Billing File Bio Lab File

#### BIOMONITORING CHAIN OF CUSTODY FORM North Shore Sanitary District P.O. BOX 750 Wm. Koepsel Dr. Gurnee, IL 60031 (847) 623-6060 Client Name THEET, P.O. BOX 3020, NAPERVYLLE IL Address Phone Contact Person: Permit Number: Plant Location: SPETHERROOK WATER RECLANATION CENTER, 3712 PLAINTED NAMERYTHE Rd. 1 18.706 M Mean Daily Discharge on Sample Collection Date: BIOMONITORING - ACUTE TOXICETY Testing Requirements: a) Fisy-9665 Static LC50 Broassay- FLATHERS MINNOW B) INVERTERNATE - 48 HK STATIC LLSO BIOMSSAY-CERTODAPHNIA Name of Receiving Water Body: Effluent Samples Sample Collector (Print): Joseph Signature: Sample Number Sample Point Type of Sample (Grab or Composite) Collection Date/Time 24 hr Comosito Discharge 001 Receiving Water Samples Sample Collector (Print): Joseph SLEVNIK Signature: Sample Number Type of Sample (Grab or Sample Point DuPAGE RIVERA 3RAB -upsinizm of Discharge Relinquished By: Date/Time Received By: Date/Time V-11-69 10:15 AM Dispatched By: Received for Laboratory By: Method of Shipment: Effluent Sample Temperature on Receipt: 6.9°C 8.90C Receiving Water Temperature on Receipt: Lapsed Time from Sample Collection to Delivery at the Laboratory: Test Started, Date/Time: Lapsed Time from Sample Collection to Test Started:

# Whole Effluent Toxicity Reporting: Source of Effluent and Receiving Water

#### **EFFLUENT SAMPLE**

Sampling Point:

Sample Collection Method:
Collection Dates and Times:
Mean Daily Discharge on the Sample Collection Date:
Lapsed Time From Sample Collection to Delivery:
Lapsed Time From Sample Collection to Analysis Begins:
Sample Temperature When Received at the Laboratory:

City of Naperville
Springbrook Water Reclamation
Center
24-hour composite
8/10/09 0000-2400
18.706 MGD
10 hours 15 minutes
15 hours
6.9 deg C (transported on wet ice)

#### RECEIVING WATER SAMPLE

Sampling Point:
Sample Collection Method:
Collection Dates and Times:
Sample Temperature When Received at the Laboratory:

Du Page River Grab 8/11/09 @ 0745 8.9 deg C

## North Shore Sanitary District Biomonitoring Laboratory Standard Testing Protocols for:

# The Ceriodaphnia dubia 48 hr. Acute Toxicity Test

2	
1. Test Type:	Static non-renewal
2. Test Duration:	48 hours
3. Test Chamber:	30 ml polystyrene cup
4. Test Solution Volume:	20 ml
5. Age of Test Organism:	juvenile, < 24 hours old ( 24 hour hatching window )
6. Number of Organisms per Test Chamber:	5
7. Number of Replicates per Concentration:	4
8. Number of Organisms per Concentration:	20
9. Feeding Regime:	Fed <u>Selenastrum</u> algae daily (Approx. 4.2 * 10 <sup>5</sup> cells/ml in the culture vessel) and YCT
10. Culturing Temperature:	25.0 C +/- 1.0 C
11. Testing Temperature:	25.0 C +/- 1.0 C
12. Test Organism Source:	In house cultures obtained from USEPA Newtown, Ohio
!3. End Point of Test:	Death, immotility
14. Test Acceptability Criterion:	90% or greater survival in the controls
15. Sample Holding Time:	36 hrs. after completion of sampling



# <u>Cerlodaphnia dubia</u> Acute Toxicity Test Data Summary Sheet

Discharger: City of Naperville Springbrook Water Reclamation Center

3712 Plainfield/Naperville Road

Naperville, IL 60564

Permit Number: IL0034061

Sample Date: August 10, 2009 @ 0000 - 2400

Sample Type: 24 Hour Composite

Analysis Dates: August 11, 2009 @ 1500 - August 13, 2009 @ 1430

Test Organism: Ceriodaphnia dubia <24 hours old, 24 hour hatching window

Test Organism Source: In house cultures

Test Duration: 48 hours

**Deviations from Standard Testing Protocol: None** 

Treatment	Receiving Stream Control	6.25% Effi.	12.5% Effl.	25% Effl.	50% Effl.	100% Effi.	Lab Control
Number of live organisms:	20 of 20	20 of 20	20 of 20	20 of 20	20 of 20	19 of 20	19 of 20
Survival (%):	100	100	100	100	100	95	95
pH:	7.6 - 8.3	7.6 - 8.4	7.7 - 8.4	7.7 - 8.5	7.6 - 8.4	7.4 - 8.4	7.9 - 8.4
Temp. Range (degrees C):	24.1 - 25.2 mean =24.6	24.3 - 24.9 mean =24.6	24.6 - 24.8 mean =24.7	24.6 - 24.9 mean =24.8	24.6 - 24.8 mean =24.7	24.9 - 25.1 mean =25.0	24.0 - 24.8 mean =24.4
Dissolved Oxygen (mg/l):	7.0 - 7.9	7.2 - 7.9	7.2 - 7.9	7.3 - 7.6	7.5 - 7.6	7.7 - 8.4	7.6 - 7.9
Conductivity (umhos):	1099	1092	1087	1070	1043	1014	316
Hardness (mg/l as CaCO3):	314	-	<u>-</u>	_	_	265	
otal Alkalinity mg/l as CaCO3):	186	_	-	-	-	160	_
Ammonia litrogen (mg/l):	0.23	-	à	-	-	1.48	<u>""</u>
otal Residual hiorine (mg/l):	-	_	-	-	9 <del>=</del>	<0.1	-

#### North Shore Sanitary District Biomonitoring Laboratory Standard Testing Protocols for:

# The Fathead Minnow (Pimephales promelas) 96 hr. Acute Toxicity Test

1. Test Type:	Static-renewal
2. Test Duration:	96 hours
3. Test Chamber:	600 ml glass beaker
4. Test Solution Volume:	300 ml
5. Age of Test Organism:	larvae, 1-14 days old (24 hr hatching window)
6. Number of Organisms per Test Chamber:	10
7. Number of Replicates per Concentration:	2
8. Number of Organisms per Concentration:	20
9. Feeding Regime:	Before testing, daily feeding of <u>Artemia</u> nauplii in an amount sufficient to provide a slight excess 1 hour after feeding. Feed 2 hrs. prior to test solution renewal at 48hrs.
10. Culturing Temperature:	25.0 C +/- 1.0 C
11. Testing Temperature:	25.0 C +/- 1.0 C
12. Test Organism Source:	In house cultures obtained from USEPA Newtown, Ohio
!3. End Point of Test:	Death, immotility
14. Test Acceptability Criterion:	90% or greater survival in the controls
15. Sample Holding Time:	36 hrs. after completion of sampling



# Fathead Minnow ( <u>Pimephales promelas</u> ) Acute Toxicity Test Data Summary Sheet

Discharger: City of Naperville Springbrook Water Reclamation Center

3712 Plainfield/Naperville Road

Naperville, IL 60564

Permit Number: IL0034061

Sample Date: August 10, 2009 @ 0000 - 2400

Sample Type: 24 Hour Composite

Analysis Dates: August 11, 2009 @ 1200 - August 15, 2009 @ 1115
Test Organism: Fathead Minnow 14 days old, 24 hour hatching window

**Test Organism Source:** In house cultures

Test Duration: 96 hours

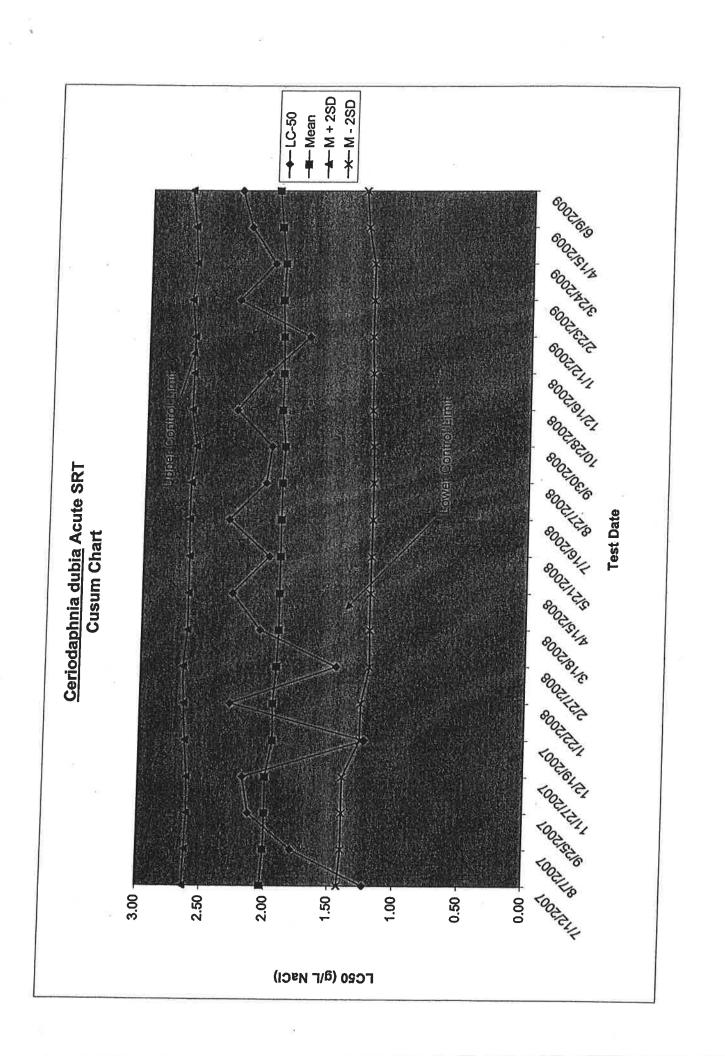
**Deviations from Standard Testing Protocol: None** 

Treatment	Receiving Stream Control	6.25% Effl.	12.5% Effl.	25% Effi.	50% Effl.	100% Effi.	Lab Control
Number of live organisms:	20 of 20	20 of 20	20 of 20	20 of 20	20 of 20	20 of 20	20 of 20
Survival (%):	100	100	100	100	100	100	100
рН :	7.6 - 8.3	7.6 - 8.3	7.7 - 8.3	7.7 - 8.3	7.6 - 8.3	7.4 - 8.2	7.9 - 8.3
Temp. Range (degrees C):	24.1 - 25.8 mean =25.2	24.3 - 25.4 mean =25.1	24.6 - 26.0 mean =25.3	24.6 - 25.6 mean =25.0	24.4 - 25.6 mean =25.1	24.5 - 25.6 mean =25.1	24.0 - 25.8 mean =25.1
Dissolved Oxygen (mg/l):	7.0 - 8.0	7.2 - 7.8	7.2 - 7.6	7.3 - 7.6	7.2 - 7.7	7.0 - 8.4	7.1 - 7.9
Conductivity (umhos):	1099 - 1116	1092 - 1105	1087 - 1095	1070 - 1087	1043 - 1063	1002 - 1014	315 - 316
lardness (mg/l s CaCO3):	314	s <b>—</b> ×		_	-	265	_
otal Alkalinity mg/l as CaCO3):	186	_	-	_	-	160	_
itrogen (mg/l):	0.23	=	-	-	<u> </u>	1.48	_
otal Residual hiorine (mg/l):	-	_	_	-	=	<0.1	

## Quality Assurance Standard Reference Toxicity Testing

# Ceriodaphnia dubia 48 hr. Acute SRT

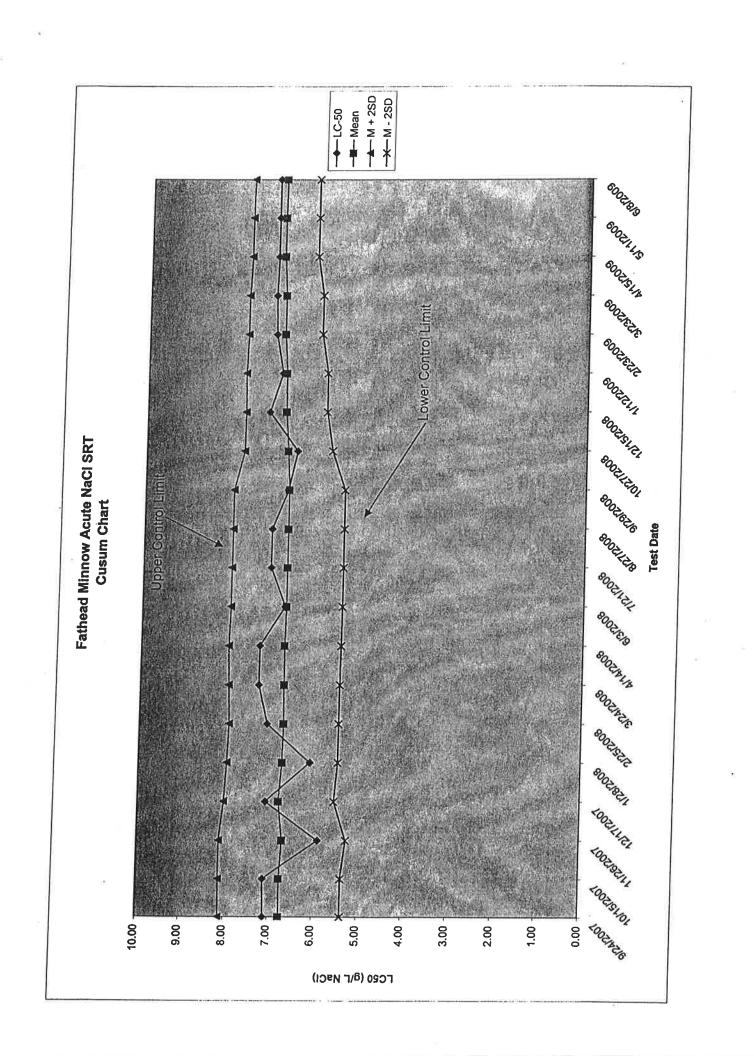
Reference Toxicant:	Sodium chloride (NaCl)
Source:	Fisher Scientific
Date Received:	10/22/03
Lot Number:	035425
Dilution Water:	Laboratory Culture Water
Methods:	Same as listed under Standard Testing Protocols for The Ceriodaphnia dubia 48 hr. Acute Toxicity Test
Most Recent Test:	6/9/2009
Test Results:	LC 50 = 2.30 g/l NaCl Upper Control Chart Limit = 2.69 Lower Control Chart Limit = 1.32 see attached cusum chart



# Quality Assurance Standard Reference Toxicity Testing

# Fathead Minnow (Pimephales promelas) 96 hr. Acute SRT

Reference Toxicant:	Sodium chloride (NaCl)
Source:	Fisher Scientific
Date Received:	10/22/03
Lot Number:	035425
Dilution Water:	Laboratory Culture Water
Methods:	Same as listed under Standard Testing Protocols for The Fathead Minnow 96 hr. Acute Toxicity Test
Most Recent Test:	6/8/2009
Test Results:	LC 50 = 7.10 g/l NaCl Upper Control Chart Limit = 7.69 Lower Control Chart Limit = 6.21 see attached cusum chart



Ceriodaphnia dubia Acute Toxicity Testing - Mortality Data Client Name: Naperville Person Conducting Test: Il Sample Number: Test Start Date:8/11/09 Time: 1500) Sample Date: 8/10-11/09 Test End Date: 8/13/09 Test Type: Acute- static Dilution Water Used: Rec Stream Age of Neonates: < 24 krs. Hatching Window: 224 hrs. Feeding: Fed Selenastrum Algae and YCT prior to testing Test Vessel Size: 8 30 ml Test Solution Volume: 20 m / Sample Treatment?: Sample strained through 63 un planton net

	<del></del>			
Concentration or % Effluent	Test Vessel Number	Numbe	r of Living	Organisms
	wantbet	0 hrs	24 hrs	48 hrs
Rec. Stream Control	A-1	5	5	5
	B-1	5	5	5
Control	C-1	.5	5	5
	D-1	5	5	5
_	A-Z	5	5	5
6.25	B-Z	5.	5	5
*	(-2	5	5	5
	D-2	5	5	5
	A-3	5	5	<
12-5	B-3	5	5	5
1	(-3	5	5	5
	D-3	5	5	5
	A -4	5	5	5
25	B-4	5	5	5
L	(-4	5	5	5
	0-4	5	5	5

Concentration or % Effluent	Test Vessel	Number	of Living	Organisms
	Number	0 hrs	24 hrs	48 hrs
	A-5	5	5	5
50	B-5	5	5	5
	C-5	5	5	5
	D-5	5	5	5
	A-6	5	5	5
100	B-6	5	5	5
	C-6	5	5	5
	D-6	5	4	4
1 6	A-7	- 5	5	5
Cab	B-7	5	5	4
Control	C-7	5	5	5
	D-7	5	5	5
	8			
	9			
,				

l	r	1	ī	t	i	a	1	s	:
	_	7	_	_	-	_	-	_	***

O hrs= M	24 hrs= 1901	48 hrs= 12l
	24 1115- 100	48 hrs= / C

Comments:		
The state of the s		· · · · · · · · · · · · · · · · · · ·

Ceriodaphnia dubia Acute toxicity Testing Chemistry Data Client Name: Maparille

Sample Number:

Test Start Date: 8/11/09

Sample Date: 8/10-11/09



	¥.	Pec. Strum	_		Concentra	Concentration % Effluent	- Tools		
Parameter	Time	Gatal	6.25	12.5	25	(S)		1. 66.41	
Dissolved	Initial	7.0	2.7	7.2	7.3	$\  $		100	
Oxygen	24 hrs						Š		
(Mg/l)	48 hrs	7.9	7.9	7.9	7,6	2	11	2	
Hd	Initial	7.6	7.6	7.7	ノン	7.6	7.4	20,1	
(units)	24 hrs		÷						
2	48 hrs	8.3	48	8.4	5.5	7.8	700	200	
Temp	Initial	24.1	24.3	24.6	-	92	7.57	0.62	
(Cent)	24 hrs								
	48 hrs	25.2	54.9	24.8	672	24.8	24.9	248	
Cond	Initial	1099	2601	1087	00.07	1043	1014	316	
(micromhos)	l Since	-1-2							
NH3 (mg/l)	Initial	6.23					1.48		
T. Cl2 (mg/l)	Initial						707		
Alk (mg/l)	Initial	981	5				09)		
Hard (mg/l)	Initial	314					592		
				59					

<u>Initials:</u>

24 hr

Fathead Minnow (Pimephales promelas) Acute Toxicity Testing - Mortality Data Client Name: Naperville Person Conducting Test: 1994 Test Start Date: 8/11/09 Sample Number: Time: 1200 Test End Date: 8/15/09 Time: 1/15 Sample Date: 8/10-11/09 Test Type: Acute - statuc reneval Dilution Water Used: Rec\_ Stream Age of Fish: 14 days Hatching Window: 24 hrs. Feeding: Fed newly hatched brine shrimp prior to testing and at 46 hrs. Aeration: none Test Vessel Size: 600 m l Test Solution Volume: 300 m/

Sample Treatment ?: Sample Strained through 63 um planton net

Concentration or % Effluent	Test Vessel	1	lumber o	f Living (	Organism	S
	Number	0 hrs	24 hrs	48 hrs	72 hrs	96hrs
Rec. Stream		10	10	10	10	10
Control	2	10	10	10	10	10
6.25	3	10	10	10	10	10
6.63	4	10	10	10	10	10
12.5	5	10	10	10	10	10
16.3	6	10	10	10	10	10
06	. 7	10	10	10	10	10
25	8	10	10	10	10	10
50	9	10	10	10	10	10
50	10	10	10	10	10	10
100	( )	10	10	10	10.	10
100	12	10	10	10	10	10
lab	13	10	10	10	10	10
Control	14	16	10	10	10	10

# <u>Initials:</u>

21 hram hld

19. C

1120

Fathead Minnow (Pimephales promelas) Acute toxicity Testing Chemistry Data Client Name: Mapsoville

Sample Number:

Test Start Date: 8/11/09

Sample Date: 8/10-11/09



		Rec. Stream			Concentra	Concentration. % Effluent	fluent		
Parameter	Time	Gattol	6.25	571	52	50	100	17711	
3.	Initial	1.0	7.4	77	7.7	7 \	200	10/mo	
Dissolved	24 hrs	7.3	7.6	7.3	7.7	7.7	700	いっし	
Oxygen	48 hrs	0.8 to	7.8	7.5	7.2	7	12/2	35	
(l/gm)	72 hrs	J,	7.6	7,6	7,5	7.3	1,7	>0.	
	96 hrs	٦.4	7.7	7.2	7.4	7.7	0.0	7.	
8	Initial	5.0	7.6	アンプ	1.7	٦	7.4	10	
Hd	24 hrs	∞ Ò	න _ _	18	000	900	000	200	
(units)	48 hrs	00	- 66	1.8	80	8.0	2.9	2.7	
	72 hrs	∞. —	80 77	2.8	2.8	8.7	_ &	\cappa_{\text{\cappa_{\cappa_{\text{\cappa_{\cappa_{\text{\cappa_{\cappa\cappa_{\cappa\cappa_{\cappa\cappa_{\cappa\cappa_{\cappa\cappa_{\cappa\cappa_{\cappa\cappa_{\ca	
	96 hrs	8,3	8.3	8,3	8.3	85.	7.00	300	
	Initial	24.1	24.3	24.6	4.6	24.6	1.52	240	
Temp	24 hrs	25.8	75.y	75.4	25.6	25.5	45.4	75.7	
(Cent)	48 hrs	25.1	24.8	25.0	24.7	24.4	5.72	24.7	
	72 hrs	25.3	452	26.0	1.55	25.6	25.6	25.5	
	96 hrs	25.6	75.4	75.5	252	5.25	125.1	25.5	
Cond	Initial	1099	1092	1087	0701	E401	4101	3/6	
(micromhos)	48 hrs	1116	1105	1095	1097	1063	1007	3/5	
NH3 (mg/l)	Initial	0.23					1.48		
T. Cl2 (mg/l)	Initial						707		
Alk (mg/l)	Initial	981					160		
Hard (mg/l)	Initial	314					265		
Initials:	Initial	24 hr	48 hr	70 hr	1 20				

IIIIIals.

NORTH SHORE SANITARY DISTRICT

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SECRETARY MARY JO BRYANT
ATTORNEY GREGORY T. JACKSON

May 21, 2009

Mr. Joseph Slevnik City of Naperville P.O. Box 3020 Naperville, IL 60566

Dear Mr. Slevnik:

Whole effluent sample was collected at the Springbrook Water Reclamation Center WWTP, NPDES permit No. IL0034061, May 11, 2009 for Whole Effluent Toxicity (WET) analysis. The effluent sample and receiving stream control were delivered on the same day, by City of Naperville personnel, to the laboratory at the North Shore Sanitary District (NSSD).

The Springbrook Water Reclamation District is located at 3712 Plainfield/Naperville Road, Naperville, IL and the receiving water body is the DuPage River.

The requested analysis is 48 hour, acute invertebrate testing using <u>Ceriodaphnia dubia</u> and 96 hour, acute vertebrate testing using fathead minnows. All testing was performed at the NSSD laboratory according to procedures outlined in the NSSD Quality Assurance Manual and EPA/821-R-02-012.

There were no deviations from the referenced method.

The following is a brief summary of the results.

- 1. The 48 hour invertebrate test using <u>Ceriodaphnia dubia</u> resulted in 100 percent survival of test organisms in whole effluent indicating no apparent acute toxicity.
- 2. The 96 hour fish testing using fathead minnows (<u>Pimephales promelas</u>) resulted in 95 percent survival of test organisms in whole effluent indicating no apparent acute toxicity.

The results of these tests show that the City of Naperville/Springbrook Water Reclamation Center Whole Effluent collected on May 11, 2009 exhibited no acute toxicity to either test species.

Please feel free to call if you have questions.

Sincerely,

Robert Flood Aquatic Biologist

NORTH SHORE SANITARY DISTRICT

RF:mjb

cc:

Lab Billing File Bio Lab File

#### BIOMONITORING CHAIN OF CUSTODY FORM North Shore Sanitary District P.O. BOX 750 Wm. Koepsel Dr. Gurnec, IL 60031 (847) 623-6060 Client Name: EMBLE STREET, P.O. Box 3020, Address NAPFRYILLE, TL Phone Contact Person: JOSEPH SLEVNIK Permit Number: IL0034061 Plant Location: SPRINGBROOK WATER RECLAMATION CENTER, 3712 PLAINTIELD/NAPERVILLE Rd, NAPERVILLE, IL 22.999 MGD 60564 Mean Daily Discharge on Sample Collection Date: BIOMONITORING - Acute Toxicity Testing Requirements: a) Fixt. 96hr STATIC LCSO BIOASSAY - FLATHEAD MIGNARY 4) INVERTEBRATE 48 br STATIC LCSO BIOASSAY - CERTIODAPHNIA Name of Receiving Water Body: Effluent Samples Sample Collector (Print): JOSEPH SLEVNIK Signature: Sample Number Sample Point Type of Sample (Grab or Collection Date/Time 14:00 AM DISCHARGE COL COMPOSITE (24 HOLIX) 24hr Composite Receiving Water Samples Sample Collector (Print): JOSEPH SLEVNIK Signature: Sample Number Sample Point Type of Sample (Grab of Composite) Collection Date/Time DUPAGE RIVEAL GRAB 07:50 05-12-09 LOSTLEAM discharge Relinquished By: Date/Time Received By: 10150 ZM Dispatched By: Received for Laboratory By: Method of Shipment: 5,4°C Effluent Sample Temperature on Receipt: Receiving Water Temperature on Receipt:\_

10 hrs

14 hrs.

Lapsed Time from Sample Collection to Delivery at the Laboratory:

Test Started, Date/Time: 5/12/04@ 1400

Lapsed Time from Sample Collection to Test Started:

# Whole Effluent Toxicity Reporting: Source of Effluent and Receiving Water

#### **EFFLUENT SAMPLE**

Sampling Point:

Sample Collection Method:
Collection Dates and Times:
Mean Daily Discharge on the Sample Collection Date:
Lapsed Time From Sample Collection to Delivery:
Lapsed Time From Sample Collection to Analysis Begins:
Sample Temperature When Received at the Laboratory:

City of Naperville
Springbrook Water Reclamation
Center
24-hour composite
5/11/09 0000-2400
22.999 MGD
10 hours
14 hours
5.4 deg C (transported on wet ice)

#### RECEIVING WATER SAMPLE

Sampling Point:
Sample Collection Method:
Collection Dates and Times:
Sample Temperature When Received at the Laboratory:

Du Page River Grab 5/12/09 @ 0750 7.3 deg C

# North Shore Sanitary District Biomonitoring Laboratory Standard Testing Protocols for:

# The Ceriodaphnia dubia 48 hr. Acute Toxicity Test

1. Test Type:	Static non-renewal
2. Test Duration:	48 hours
3. Test Chamber:	30 ml polystyrene cup
4. Test Solution Volume:	20 ml
5. Age of Test Organism:	juvenile, < 24 hours old ( 24 hour hatching window )
6. Number of Organisms per Test Chamber:	<b>5</b>
7. Number of Replicates per Concentration:	4
8. Number of Organisms per Concentration:	20
9. Feeding Regime:	Fed <u>Selenastrum</u> algae daily (Approx. 4.2 * 10 <sup>5</sup> cells/ml in the culture vessel) and YCT
10. Culturing Temperature:	25.0 C +/- 1.0 C
11. Testing Temperature:	25.0 C +/- 1.0 C
12. Test Organism Source:	In house cultures obtained from USEPA Newtown, Ohio
!3. End Point of Test:	Death, immotility
14. Test Acceptability Criterion:	90% or greater survival in the controls
15. Sample Holding Time:	36 hrs. after completion of sampling



# <u>Ceriodaphnia dubia</u> Acute Toxicity Test Data Summary Sheet

Discharger: City of Naperville Springbrook Water Reclamation Center

3712 Plainfield/Naperville Road

Naperville, IL 60564

Permit Number: IL0034061

Sample Date: May 11, 2009 @ 0000 - 2400

Sample Type: 24 Hour Composite

Analysis Dates: May 12, 2009 @ 1400 - May 14, 2009 @ 1400

Test Organism: Ceriodaphnia dubia <24 hours old, 24 hour hatching window

**Test Organism Source: In house cultures** 

**Test Duration: 48 hours** 

**Deviations from Standard Testing Protocol: None** 

					2.5		
Treatment	Receiving Stream Control	6.25% Effl.	12.5% Effl.	25% Effl.	50% Effi.	100% Effi.	Lab Control
Number of live organisms:	20 of 20	20 of 20	20 of 20	20 of 20	20 of 20	20 of 20	17 of 20
Survival (%):	100	100	100	100	100	100	85
pH:	7.9 - 8.5	8.0 - 8.7	8.0 - 8.8	7.9 - 8.7	7.9 - 8.7	7.4 - 8.7	8.1 - 8.6
Temp. Range (degrees C):	24.4 - 25.4 mean =24.9	24.2 - 25.5 mean =24.8	24.2 - 25.2 mean =24.7	24.2 - 25.3 mean =24.8	24.2 - 25.3 mean =24.8	24.4 - 25,2 mean =24.8	24.8 - 25.2 mean =25.0
Dissolved Oxygen (mg/l):	7.7 - 8.7	7.6 - 8.6	7.7 - 8.7	7.7 - 8.6	7.5 - 8.6	7.6 - 8.5	7.6 - 7.9
Conductivity (umhos):	1250	1237	1243	1239	1210	1159	315
lardness (mg/l s CaCO3):	376	-		-	-	324	10 × 105 1
otal Alkalinity mg/l as CaCO3):	246	_	-	-	_	200	-
mmonia litrogen (mg/l):	0.05	-	-	_	_ 8-	0.30	
otal Residual hiorine (mg/l):	_		1 <del></del> 2	-	is <del></del> ×	<0.1	<u></u> 5

# North Shore Sanitary District Biomonitoring Laboratory Standard Testing Protocols for:

# The Fathead Minnow (Pimephales promelas) 96 hr. Acute Toxicity Test

1. Test Type:	Static-renewal
2. Test Duration:	96 hours
3. Test Chamber:	600 ml glass beaker
4. Test Solution Volume:	300 ml
5. Age of Test Organism:	larvae, 1-14 days old (24 hr hatching window)
6. Number of Organisms per Test Chamber:	10
7. Number of Replicates per Concentration:	2
8. Number of Organisms per Concentration:	20
9. Feeding Regime:	Before testing, daily feeding of <u>Artemia</u> nauplii in an amount sufficient to provide a slight excess 1 hour after feeding. Feed 2 hrs. prior to test solution renewal at 48hrs.
10. Culturing Temperature:	25.0 C +/- 1.0 C
11. Testing Temperature:	25.0 C +/- 1.0 C
12. Test Organism Source:	In house cultures obtained from USEPA Newtown, Ohio
!3. End Point of Test:	Death, immotility
14. Test Acceptability Criterion:	90% or greater survival in the controls
	5

36 hrs. after completion of sampling

15. Sample Holding Time:



# Fathead Minnow ( <u>Pimephales promelas</u> ) Acute Toxicity Test Data Summary Sheet

Discharger: City of Naperville Springbrook Water Reclamation Center

3712 Plainfield/Naperville Road

Naperville, IL 60564

Permit Number: IL0034061

Sample Date: May 11, 2009 @ 0000 - 2400

Sample Type: 24 Hour Composite

Analysis Dates: May 12, 2009 @ 1230 - May 16, 2009 @ 1300

Test Organism: Fathead Minnow 12 days old, 24 hour hatching window

Test Organism Source: In house cultures

Test Duration: 96 hours

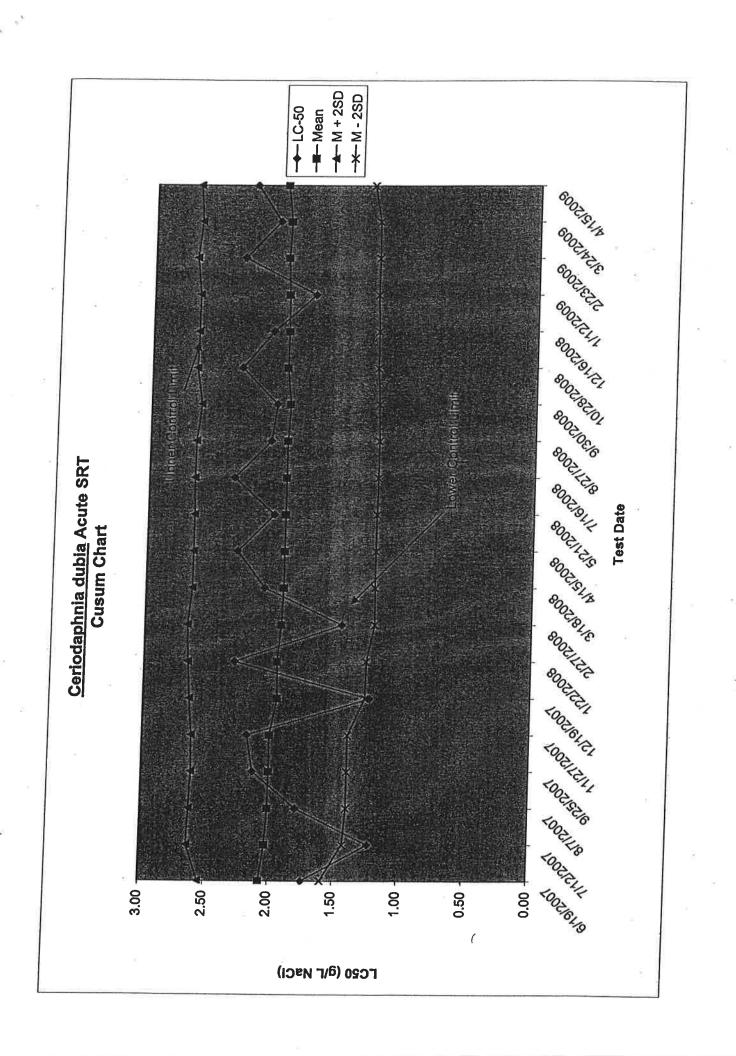
**Deviations from Standard Testing Protocol: None** 

Treatment	Receiving Stream Control	6.25% Effl.	12.5% Effl.	25% Effl.	50% Effi.	100% Effl.	Lab Control
Number of live organisms:	20 of 20	20 of 20	19 of 20	20 of 20	20 of 20	19 of 20	20 of 20
Survival (%):	100	100	95	100	100	95	100
pH:	7.9 - 8.5	8.0 - 8.6	8.0 - 8.6	7.9 - 8.6	7.9 - 8.6	7.4 - 8.5	8.1 - 8.6
Temp. Range (degrees C):	24.4 - 25.5 mean =25.0	24.2 - 25.7 mean =25.0	24.0 - 25.5 mean =24.7	24.0 - 25.8 mean =24.9	24.0 - 25.8 mean =24.8	24.1 - 25.6 mean =24.8	24.2 - 25.6 mean =25.1
Dissolved Oxygen (mg/l):	7.1 - 8.7	7.0 - 8.6	6.9 -8.7	6.9 - 8.6	6.8 - 8.6	6.6 - 8.5	6.8 - 7.9
Conductivity (umhos):	1250 - 1283	1237 - 1286	1243 - 1254	1239 - 1257	1210 - 1251	1159 - 1203	315 - 325
Hardness (mg/l as CaCO3):	376	_	-	_	240	324	4
Total Alkalinity mg/l as CaCO3):	246	-	-	_	_	200	_
Ammonia litrogen (mg/l):	0.05	; <del>-</del> \		s <del></del>	-,	0.30	
otal Residual hlorine (mg/l):	-	=	-	-	-	<0.1	

# Quality Assurance Standard Reference Toxicity Testing

# Ceriodaphnia dubia 48 hr. Acute SRT

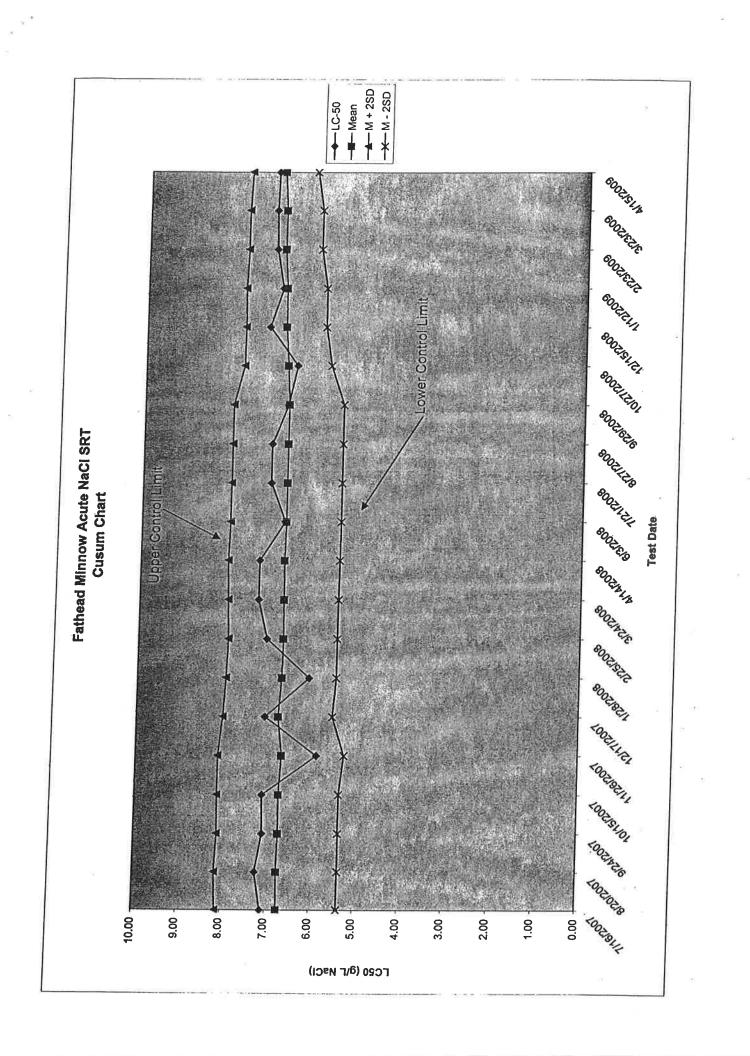
Reference Toxican	<b>:</b>		Sodium chloride (NaCl)
÷I			
Source:	74 + +5		Fisher Scientific
	. a		8
Date Received:	Tel		10/22/03
	8		2
Lot Number:			035425
			5
Dilution Water:	* "	¥	Laboratory Culture Water
		fi e e	
Methods:			Same as listed under Standard
*1			Testing Protocols for The <u>Ceriodaphnia dubia</u> 48 hr. Acute  Toxicity Test
		G (94	
Most Recent Test:	61		4/15/2009
	⊕ ⊛ <sub>(4</sub>		
Test Results:	22		LC 50 = 2.22 g/l NaCl Upper Control Chart Limit = 2.66 Lower Control Chart Limit = 1.30
		ğ	see attached cusum chart



# Quality Assurance Standard Reference Toxicity Testing

# Fathead Minnow (Pimephales promelas) 96 hr. Acute SRT

Reference Toxicant:	Sodium chloride (NaCl)
\(\frac{1}{2}\)	e e
Source:	Fisher Scientific
	Y Y
Date Received:	10/22/03
Lot Number:	035425
	9
Dilution Water:	Laboratory Culture Water
Methods:	Same as listed under Standard
<u>.</u>	Testing Protocols for The Fathead Minnow 96 hr. Acute
in a second seco	Toxicity Test
Most Recent Test:	4/22/2009
e e	
Test Results:	LC 50 = 7.10 g/l NaCl Upper Control Chart Limit = 7.71
	Lower Control Chart Limit = 6.20 see attached cusum chart



# Ceriodaphnia dubia Acute Toxicity Testing - Mortality Data

	na - mortality Data
Client Name: Naperville	Person Conducting Test: 191
Sample Number:	
Sample Date: 5/11-12/09	Test Start Date: 5/12/09 Time: 1400
	Test End Date: 5/14/09 Time: 1400
Test Type: Acute - Static	Dilution tares P
	Dilution Water Used: Rec. Stream
Age of Neonates: <24 hrs	Helebia - tag
	Hatching Window: 424 hrs
Feeding: Fed Selenastrum Algae a	VIT . L. L.
- gae a	muter prorto restina
Test Vessel Size: 30 ml	Total
	Test Solution Volume: 20ml
Sample Treatment ?: Sample Stand	111 100
- Straine	ed through 63 um planton net
₩	TON ION ICES

Concentration or % Effluent	Test Vessel Number	Number	Organisms	
	Hamber	0 hrs	24 hrs	48 hrs
Rec. Stream	4-1	5	5	5
Control	5-1	5	5	-
CONT. I	6-1	.5	5	west <
	7-1	5	5	5
	4-2	5 ,	5	-
6.25	5-7	5	5	7
0.2	6-2	5	5	5
	7-2	5	5	5
	4-3	5	5	
12-5	5-3	5	5	5
2	6-3	5	5	5
	7-3	.5	5	2
	4-4	5	5	2
25	5-4	5	5	2
	6-4	5	5	2
	7-4	5	5	2

Concentration or % Effluent	Test Vessel	Number	of Living	Organisms
Or 70 Ethidelit	Number	0 hrs	24 hrs	48 hrs
	4-5	5	5	5
50	5-5	5	5	5
	6-5	5	5	5
	7-5	5	5	5
,	4-6	5	5	5
100	5-6	5	5	5
	6-6	5	5	5
# - M	7-6	5	5	5
100	4-7	5	5	4
Lab	5-7	5	4	4
Lab	6-7	5	5	5
	フーフ **	5	5	4
		р		
:-	<b>3</b>			ret i
		187		

Ì	ľ	1	i	ti	a	l	S	•

O hrs=192	24 hrs= NL	48 hrs= 16

nments:_	
	The state of the s

# Ceriodaphnia dubia Acute toxicity Testing Chemistry Data Client Name: 1/2 perville Sample Number:

Sample Number:

Test Start Date: 5/12/09

Sample Date: 5/11-12/09



		Kec. Stream			Concentra	Concentration. % Effluent	lient		
rarameter	Time	Control	6.25	12.5	25	00	000	11.12.41	
Dissolved	Initial	000 L	(C)	0	0	0	20	(a) (a)	
(				7 70	2/2	0.0	3,7	2,0	
Oxygen	24 hrs					: : :			
(mg/l)	48 hrs	して	7.6	7.7	1.1	7.5	7.6	16	
Н	Initial	6.८	0.8	0.00	7.9		77	2 ~	
(units)	24 hrs			ī			1 . ;	Š	
	48 hrs	8.5	7.00	00 00 00	8	€: [	0	×	.3
Temp	ıriitial	24.4	7.62	24.2	242	24.2		20.0	
(Cent)	24 hrs		ç					0,75	
	48 hrs	452	25.5	252	252 253	25.3	150	120	3
Cond	Initial	1250	7237	1243	1239	<b>1</b> 11 a	1/59	3/5	
(micromhos)				*				1	
NH3 (mg/l)	Initial	0.05				٠	030	gr.	
T. C(2 (mg/l)	Initial						7.07		
Alk (mg/l)	Initial	975					200		-
Hard (mg/l)	Initial	376	>				324		
						-			

Initials:

24 hr

Fathead Minnow (Pimephales promelas) Acute Toxicity Testing - Mortality Data Client Name: Naperville Person Conducting Test: 1991 Test Start Date: 5/12/09 Time: 1230 Sample Number: Sample Date: 5/11-12/09 Test End Date: 5/16/09 Time: /300 Test Type: Acute-Static renewal Dilution Water Used: Rec. Stream Age of Fish: 12 days old Hatching Window: 244rs Feeding: Fed newly hatched brine shrimp prior to testing and at 46 hrs. Aeration: hone Test Vessel Size: 600m/ Test Solution Volume: 300 m / Sample Treatment? Sample Strained through 63 un plankton net

Concentration or % Effluent	Test Vessel		Number o	f Living (		ıs
	Number	0 hrs	24 hrs	48 hrs	72 hrs	96hrs
Rec. Stream	1	10	10	10	10	10
Control	2	10	10	10	10	10
6.25	. 3	10	10	10	10	10
0.27	4	10	10	10	10	10
12.5	5	10	9	9.	9	9
(2,)	6	10	10	10	10	10
25	. 7	10	10	10	10	10
	8	10	10	10	10	0
50	9	10	[0]	10	10	(0
	10	10	10	10	10	10
100	11.	10	10	10	10	10
•	12	10	60	10	9	9
Lab	13	10	10	10	10	10
Control	14	10	10	10	10	10

# <u>Initials:</u>

O hrs=191

24 hrs= 1

48 hrs= 190

72 hrs= N

96 hrs= 40

Fathead Minnow (Pimephales promelas) Acute toxicity Testing Chemistry Data Sample Number: Client Name: Napervilla

Sample Date: 5/11-12 /09 Test Sta

Test Start Date: 5/12/09



ı		Rec. Stream			Concont	- 10 mg				
Parameter	Time	6×40	6.70	10.0	2 Concentra	Concentration, % Effluent	fluent			
	Initial	9	( Q	(1)	2	20	00	(ab Gata)		
Dissolved	24 hre	1	ا ف	pó i	9	8,6	8	2.0		
Oxygen	40 has	1,0	1.7	5.0	7.5	2-5	7.2	2,0		
	10 110	27	7.7	80,0	7.8	7.8	7.0	70	Ī	
(Marin)	/2 nrs	4	7.3	7.(	7.2	16	17	100		
	96 hrs	7	2.0	6.0	20	0 7	8	( 0	1	
	Initial	1.9	8 0	80	100	100	9 :	۵, ۵.		
풘	24 hrs	180	8.5	a	210	7:0	7.0	) 30 (	-	
(units)	48 hrs	8.3	5.80	100	000	22	, c	) ) ) )		
	72 hrs	* 0	1	200	9:5	8,7	ó	2.8		
	96 hre	1	300	0:0	5.00	8.5	4	400		
			0.0	986	90	9	\$ \$	800		
ŀ	- 1	6.67	2.42	2.67	24.2	24.2	24.4	200	Ī	
ешр	- 1	25.3	754	1221	253	250	176	0,10		
(Cent)	48 hrs	24.6	5.4.2	24.0	0110	2160		22.52		
	72 hrs	252	350	2/10	64.0	370	183	27.52		
	96 hrs	220	000	0000	25.4	24.8	0.50	35.50		
Cond	Initial	200	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	523	65.8	25.8	25.6	25.c		
(micrompos)	Ag has	1200	12.27	(47)	1239	(200	1159	3/5		
(S) ()	- 1113 - 1113	\$27,	9271	1254	1257	1521	1203	325		
(I/BW) SHN	Initial	0.08								
T. Cl2 (mg/l)	Initial						0.30			
Alk (mg/l)	Initial	246					40°			
Hard (mg/l)	Initial	376					2002	•		
Initials:							1728		1/2	
<u>מ</u> נוס		27 72	- 07		1					

# Appendix B

TCLP, Paint Filter Test, and other Landfill Disposal Tests



IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

March 05, 2010

Mr. Joe Slevnik
NAPERVILLE, CITY OF
PO Box 3020
Naperville, IL 60566-7020

Project ID: Sept '09 - Jan -10 Production First Environmental File ID: 10-0687 Date Received: February 26, 2010

Dear Mr. Joe Slevnik:

The above referenced project was analyzed as directed on the enclosed chain of custody record.

All Quality Control criteria as outlined in the methods and current IL ELAP/NELAP have been met unless otherwise noted. QA/QC documentation and raw data will remain on file for future reference. Our accreditation number is 100292 and our current certificate is number 002205: effective 02/06/09 through 02/28/10.

I thank you for the opportunity to be of service to you and look forward to working with you again in the future. Should you have any questions regarding any of the enclosed analytical data or need additional information, please contact me at (630) 778-1200 or stan@firstenv.com.

Sincerely,

Stan Zaworski Project Manager



IL ELAP / NELAC Accreditation # 100292

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# Case Narrative

# NAPERVILLE, CITY OF

Project ID:

Sept '09 - Jan -10 Production

First Environmental File ID: 10-0687

Date Received:

February 26, 2010

7.77	g Description	E HARCE	Description
<	Analyte not detected at or above the reporting limit.		LCS recovery outside control limits; high bias.
В	Analyte detected in associated method blank.	L	; LCS recovery outside control limits; low bias.
C	Identification confirmed by GC/MS.	M	MS recovery outside control limits; LCS acceptable.
D	Surrogates diluted out; recovery not available.	M+	MS recovery outside control limits high bias; LCS acceptable.
E	Estimated result; concentration exceeds calibration range.	M-	MS recovery outside control limits low bias; LCS acceptable.
F	Field measurement.	: N	Analyte is not part of our NELAC accreditation.
		ND	Analyte was not detected using a library search routine; No calibration standard was analyzed.
G	Surrogate recovery outside control limits; matrix effect.	P	Chemical preservation pH adjusted in lab.
H	Analysis or extraction holding time exceeded.	Q	The analyte was determined by a GC/MS database search.
J	Estimated result; concentration is less than calib range.	S	Analyte was sub-contracted to another laboratory for analysis.
K	RPD outside control limits.	T	Sample temperature upon receipt exceeded 0-6°C
T	Routine Reporting Limit (Lowest amount that can be detected when routine weights/volumes are used without dilution.)	W	Reporting limit elevated due to sample matrix.

All quality control criteria, as outlined in the methods, have been met except as noted below or on the following analytical report.

### Sample Batch Comments:

Sample acceptance criteria were met.



IL ELAP / NELAC Accreditation # 100292

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# **Analytical Report**

Client:

NAPERVILLE, CITY OF

Project ID:

Sept '09 - Jan -10 Production

Sample ID:

NR10-11 BSB #1 Sept '09 - Jan'10 Prod

Sample No:

10-0687-001

Date Collected: 02/26/10

Time Collected: 12:30

Date Received: 02/26/10

Date Reported: 03/05/10

Analyte		Result	R.L.	Units	Flags
Percent Total Solids Analysis Date: 02/26/10	Method: 25401	3			
Total Solids		18.99		%	
TCLP Volatiles Method 1311 Analysis Date: 03/04/10	Method: 5030E	3/8260B			
Benzene		< 0.050	0.050	mg/L	
2-Butanone (MEK)		< 0.100	0.100	mg/L	
Carbon tetrachloride	)	< 0.050	0.050	mg/L	
Chlorobenzene		< 0.050	0.050	mg/L	
Chloroform		< 0.050	0.050	mg/L	
1,2-Dichloroethane	E	< 0.050	0.050	mg/L	
1,1-Dichloroethene		< 0.050	0.050	mg/L	
Tetrachloroethene		< 0.050	0.050	mg/L	
Trichloroethene		< 0.050	0.050	mg/L	
Vinyl chloride		< 0.100	0.100	mg/L	
CCLP Semi-Volatiles Method 1311 Analysis Date: 03/04/10	Method: 8270C		Preparation Preparation D	Method 3510 Date: 03/04/10	0C
,4-Dichlorobenzene		< 0.10	0.10	mg/L	
,4-Dinitrotoluene		< 0.10	0.10	mg/L	
lexachlorobenzene		< 0.10	0.10	mg/L	
lexachlorobutadiene		< 0.10	0.10	mg/L	
Iexachloroethane		< 0.10	0.10	mg/L	
-Methylphenol		< 0.10	0.10	mg/L	
& 4-Methylphenol		< 0.10	0.10	mg/L	
itrobenzene		< 0.10	0.10	mg/L	
entachlorophenol		< 0.50	0.50	mg/L	
yridine		< 0.50	0.50	mg/L	
4,5-Trichlorophenol		< 0.10	0.10	mg/L	
4,6-Trichlorophenol		< 0.10	0.10	mg/L	-
CLP Metals Method 1311 nalysis Date: 03/02/10	Method: 6010B		Preparation D		A
rsenic		0.007	0.002	mg/L	
ırium		< 1.0	1.0	mg/L	
dmium		< 0.001	0.001	mg/L	
romium		0.006	0.001	mg/L	
pper		< 0.1	0.1	mg/L	
ad		< 0.002	0.002	mg/L	



IL ELAP / NELAC Accreditation # 100292

Date Collected: 02/26/10

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# **Analytical Report**

Client:

NAPERVILLE, CITY OF

Sept '09 - Jan -10 Production

Project ID: Sample ID:

Sample No:

10-0687-001

NR10-11 BSB #1 Sept '09 - Jan'10 Prod

Date Received:

Time Collected: 12:30 02/26/10

Date Reported: 03/05/10

Results are reported on an "as received" basis.

Analyte		Result	R.L.	Units	Flag
TCLP Metals Method 1311 Analysis Date: 03/02/10	Method: 6010E	3		n Method 301 Date: 03/02/10	
Nickel		< 0.1	0.1	mg/L	
Selenium		< 0.002	0.002	mg/L	
Silver		< 0.001	0.001	mg/L	
Zinc		0.5	0.1	mg/L	
TCLP Metals Method 1311 Analysis Date: 03/03/10	Method: 7470A				
Mercury		< 0.0005	0.0005	mg/L	
Cyanide, Total Analysis Date: 03/05/10	Method: 9010B	/9014	(a)		
Cyanide, Total		0.40	0.10	mg/kg	
Sulfide, Reactive Analysis Date: 03/04/10	Method: 7.3.4.2	•			
Sulfide, Reactive		< 10	10	mg/kg	
Flash Point - Open Cup Analysis Date: 03/03/10	Method: 1010M				
Flash Point - Open Cup		No Flas	h @	212 °F	
Paint Filter Test Analysis Date: 03/03/10	Method: 9095A		V8-00-		
Paint Filter Test		No Liqu	ıid		
pH @ 25°C, 1:10 Analysis Date: 03/03/10 14:30	Method: 4500H	В			
oH @ 25°C, 1:10		7.99		Units	
Phenols Analysis Date: 03/01/10	Method: 420.1				
Phenols		3.3	2.5	mg/kg	
Polychlorinated biphenyls (PCBs) Analysis Date: 03/04/10	Method: 8082		Preparation D	Method 3540 ate: 03/02/10	С
roclor 1016		< 80.0	80.0	ug/kg	
roclor 1221		< 80.0	80.0	ug/kg	
roclor 1232		< 80.0	80.0	ug/kg	
roclor 1242		< 80.0	80.0	ug/kg	
roclor 1248		< 80.0	80.0	ug/kg	
roclor 1254		< 160	160	ug/kg	



IL ELAP / NELAC Accreditation # 100292

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# **Analytical Report**

Client:

NAPERVILLE, CITY OF

Date Collected: 02/26/10

Project ID:

Time Collected: 12:30

Sept '09 - Jan -10 Production

Sample ID:

NR10-11 BSB #1 Sept '09 - Jan'10 Prod

Date Received:

02/26/10

Sample No:

10-0687-001

Date Reported: 03/05/10

Results are reported on an "as received" basis.

Analyte		Result	R.L.	Units	Flags
Polychlorinated biphenyls (PCBs) Analysis Date: 03/04/10	Method: 8082		Preparation Preparation I		
Aroclor 1260		< 160	160	ug/kg	
Extractable Organic Halogen Analysis Date: 03/04/10	Method: 9023				
Extractable Organic Halogens		< 25	25	mg/kg	S



CHAIN OF CUSTODY RECORD

Page of pgs

of NAPERVILLE

Company Name:

Street Address:

P.O. Box 302

e-mail: Slevnik JB nage xv/16, JL US

Via: Fax

Michalowsky

MAYNE

Phone/630)420-6125 Fax/630)420-4118

VAPERVZLUE

DSETH SLEIM/TH

Send Report To:

Sampled By:

State:

First Environmental Laboratories Phone: (630) 778-1200 • Fax: (630) 778-1233 E-mail: firstinfo@firstenv.com Naperville, Illinois 60563 IEPA Certification #100292 1600 Shore Road, Suite D

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	e e		Matrix	10 Production										PC Sample Refrigerated: Yes Refrigerator Temperature.	Freezer Temperature:
Project I.D.: 524 '09' TAN '1/1 Project I.D.: 544 '1/1 Project I.D.:		= Soil W	N/R 10-1/	9- TAN							1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1. A SH	ž	Received within 6 hrs. of collection:	Notes and Special Instructions: RICING PERC
Project I.D.:	P.O.#:	Matrix Codes	2/24/10 12:3/					*	2				FOR LAB USE ONLY:	Received within 6 loe Present: Yesz	Notes and Spec

\_ Date/Time\_ Date/Time Date/Time 2-26-10 13:35 Received By:\_ Received By:\_ Date/Time\_ Relinquished By: Relinquished By: Rev. 406



IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

March 12, 2010

Mr. Joe Slevnik
NAPERVILLE, CITY OF
PO Box 3020
Naperville, IL 60566-7020

Project ID: Sept '09-Jan '10 Production First Environmental File ID: 10-0750 Date Received: March 04, 2010

Dear Mr. Joe Slevnik:

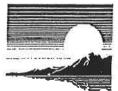
The above referenced project was analyzed as directed on the enclosed chain of custody record.

All Quality Control criteria as outlined in the methods and current IL ELAP/NELAP have been met unless otherwise noted. QA/QC documentation and raw data will remain on file for future reference. Our accreditation number is 100292 and our current certificate is number 002468: effective 02/23/2010 through 02/28/2011.

I thank you for the opportunity to be of service to you and look forward to working with you again in the future. Should you have any questions regarding any of the enclosed analytical data or need additional information, please contact me at (630) 778-1200 or neal@firstenv.com.

Sincerely,

Neal Cleghorn Project Manager



IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

# Case Narrative

# NAPERVILLE, CITY OF

Project ID:

Sept '09-Jan '10 Production

First Environmental File ID: 10-0750

Date Received:

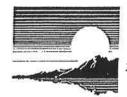
March 04, 2010

Kla	24 Description 770 to 25	Flag	Description (2007)
<	Analyte not detected at or above the reporting limit.	L+	LCS recovery outside control limits; high bias.
В	Analyte detected in associated method blank.	L	LCS recovery outside control limits; low bias.
C	Identification confirmed by GC/MS.	M	MS recovery outside control limits; LCS acceptable.
D	Surrogates diluted out; recovery not available.	M+	MS recovery outside control limits high bias; LCS acceptable.
E	Estimated result; concentration exceeds calibration range.	M-	MS recovery outside control limits low bias; LCS acceptable.
F	Field measurement.	N	Analyte is not part of our NELAC accreditation.
		ND	Analyte was not detected using a library search routine; No calibration standard was analyzed.
G	Surrogate recovery outside control limits; matrix effect.	P	Chemical preservation pH adjusted in lab.
H	Analysis or extraction holding time exceeded.	Q	The analyte was determined by a GC/MS database search.
J	Estimated result; concentration is less than calib range.	S	Analyte was sub-contracted to another laboratory for analysis.
K	RPD outside control limits.	Т	Sample temperature upon receipt exceeded 0-6°C
RL	Routine Reporting Limit (Lowest amount that can be detected when routine weights/volumes are used without dilution.)	w	Reporting limit elevated due to sample matrix.

All quality control criteria, as outlined in the methods, have been met except as noted below or on the following analytical report.

#### **Sample Batch Comments:**

Sample acceptance criteria were met.



IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

# **Analytical Report**

Client:

NAPERVILLE, CITY OF

Date Collected: 03/04/10

Project ID:

Sept '09-Jan '10 Production

Time Collected: 7:50

Sample ID:

Date Received:

03/04/10

NR10-11 BSB #1 Sept '09-Jan '10 Prod.

10-0750-001 Sample No:

Date Reported: 03/12/10

Results are reported on an "as received" basis.

Analyte		Result	R.L.	Units	Flags
TCLP Pesticides Method 1311 Analysis Date: 03/12/10	Method: 8081A		Preparation Preparation I	Method 351 Date: 03/10/10	
Chlordane (Total)		< 0.005	0.005	mg/L	
Endrin		< 0.001	0.001	mg/L	
gamma-BHC (Lindane)		< 0.005	0.005	mg/L	
Heptachlor		< 0.005	0.005	mg/L	
Heptachlor epoxide	8:	< 0.005	0.005	mg/L	
Methoxychlor		< 0.005	0.005	mg/L	
Toxaphene		< 0.010	0.01	mg/L	
TCLP Herbicides Method 1311 Analysis Date: 03/12/10	Method: 8321A				
2,4-D		< 0.5	0.5	mg/L	S
Silvex (2,4,5-TP)		< 0.5	0.5	mg/L	S
TCLP Extraction Analysis Date: 03/04/10	Method: 1311			м.	
FCLP Extraction		Comple	te		



1600 Shore Road, Suite D Naperville, Illinois 60563 Phone: (630) 778-1200 • Fax: (630) 778-1233 First Environmental Laboratories E-mail: firstinfo@firstenv.com IEPA Certification #100292

Page of pgs	IL 2111 1005/6/2	(evn.)
CHAIN OF CUSTODY RECORD  Company Name: (Lity of NAPERVILE	Street Address: 7.0, BOX City: NAPERVILLE State:	Phone: (630) 426 - 6125 Fax(630) 420 - 4/1/8 e-mail: Send Report To: JOSEPH SerVITER Via: Fax

Project I.D.: SEPT OY - JAN 10 Production P.O. #:	ă.	) >*	200	CORT.						
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3/4/10 07:50 NK10-11 RSB #1	0	X	5			1	1	Comments	Lab ID.	
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Cooler Temperature: 0.1-62C Yes_No	Sample Refrigerated: Yes_ No Refrigerator Temperature: 5035 Vals Frozen: Yes_ No_	rated: Yennperature	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Contai	ners Recei	ved Preser	Containers Received Preserved:   Yes		8" 3	6604
Notes and Special Instructions:	oozei terriperature:	ame	<b>.</b>							
7										

\_ Date/Time\_ - Date/Time\_

8'53 Received By:\_ Received By:

Date/Time 03/04/

Date/Time\_

Relinquished By: Relinquished By:

# **Appendix C**

# Platt Drawings and Addresses for Land Application Field Owners

Calendar Year 2009

# Field and Owner Summary Table

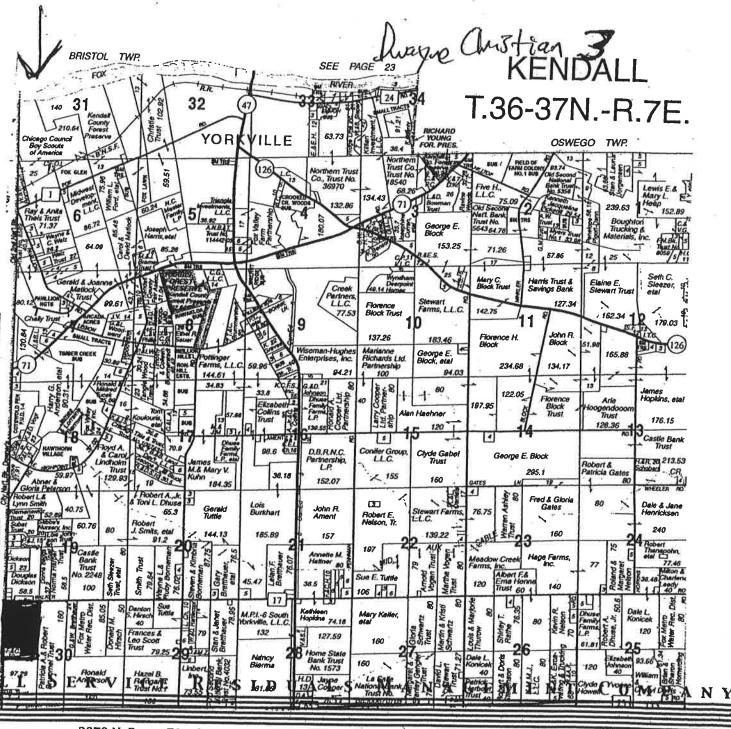
Field(s) Designation	Owner	Owner's Address
		non-responsive
Christian Field 3	Duane Christian	
		non-responsive
Erickson, Field 1	Bruce Erickson	
		non-responsive
Firrantello, Field 1	Greg Firantello	
		non-responsive
Fox Field 1	Bill Fox	
Loftus Field 3, Loftus Field 4,		non-responsive
Loftus Field 14, Loftus Field		
17, and Loftus Field 19	Bob Loftus	



#### PLAT MAP



Field 3 85 Acres Kendall County Kendall Township Section 30



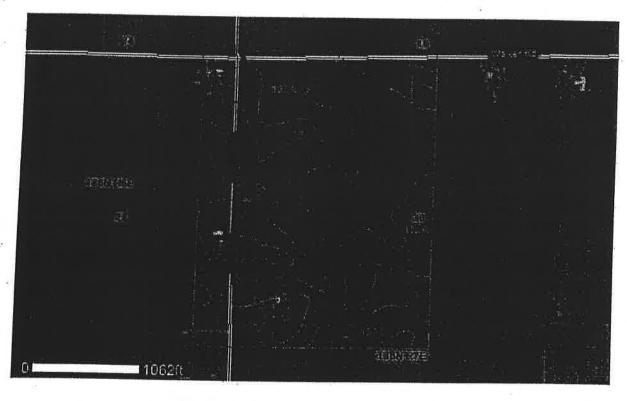


# **SOIL SERIES**



Field 3 85 Acres Kendall County Kendall Township Section 30

SOIL SERIES	<b>TEXTURE</b>	% SLOPE	<b>PERMEABILITY</b>
Saybrook, 145B	SiL	2-5%	0.6-2.0 in/hr
Brenton, 149A	SiL	0-2%	0.6-2.0 in/hr
Drummer, 152A	SiC	0-2%	0.6-2.0 in/hr
Elburn, 198A	SiL	0-2%	0.6-2.0 in/hr



# ULL SERVICE RESIDUALS MANAGEMENT COMPANY



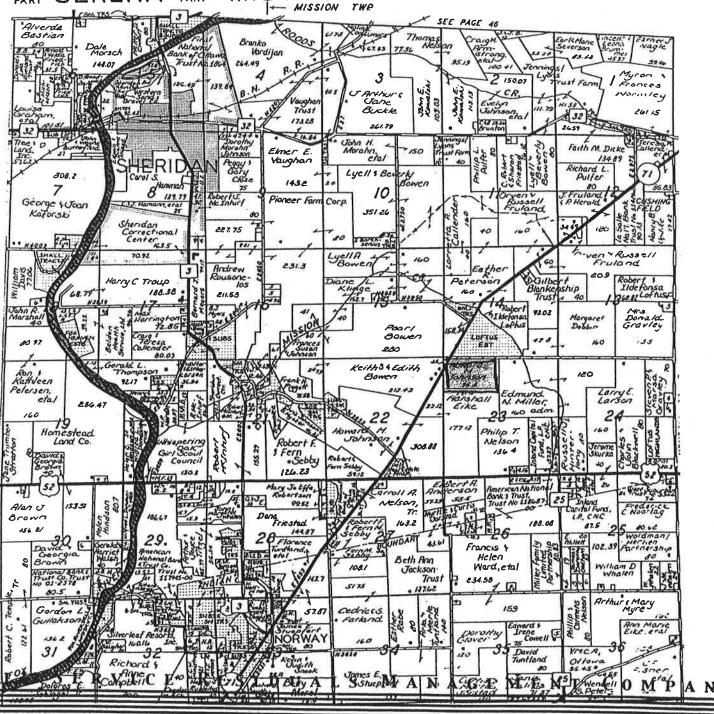
#### PLAT MAP

Bruce Erickson non-responsive

Field 1
75 acres
LaSalle County
Mission Township
Section 23

SOUTH NORTHVILLE
EAST SERENA SOUTH MISSION
PART SERENA PART MISSION

T 35 N-R 5 E.



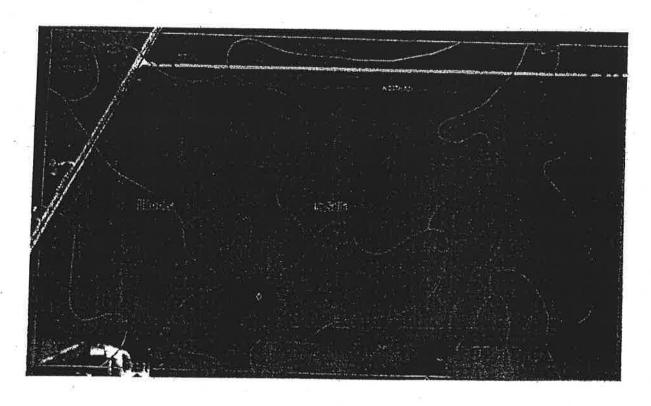


# SOIL SERIES

Bruce Erickson non-responsive

Field 1
75 acres
LaSalle County
Mission Township
Section 23

SOIL SERIES	<u>TEXTURE</u>	% SLOPE	PERMEABILITY
Swygert, 91B Brenton, 149A Drummer, 152A Elburn, 198A Rutland, 375B Blackberry, 679B	SiCL SiL SiL SiL SiL SiL	2-5 % 0-2 % 0-2 % 0-2 % 2-5 % 2-5 %	0.2-0.6 in/hr 0.6-2.0 in/hr 0.6-2.0 in/hr 0.6-2.0 in/hr 0.2-0.6 in/hr 0.6-2.0 in/hr

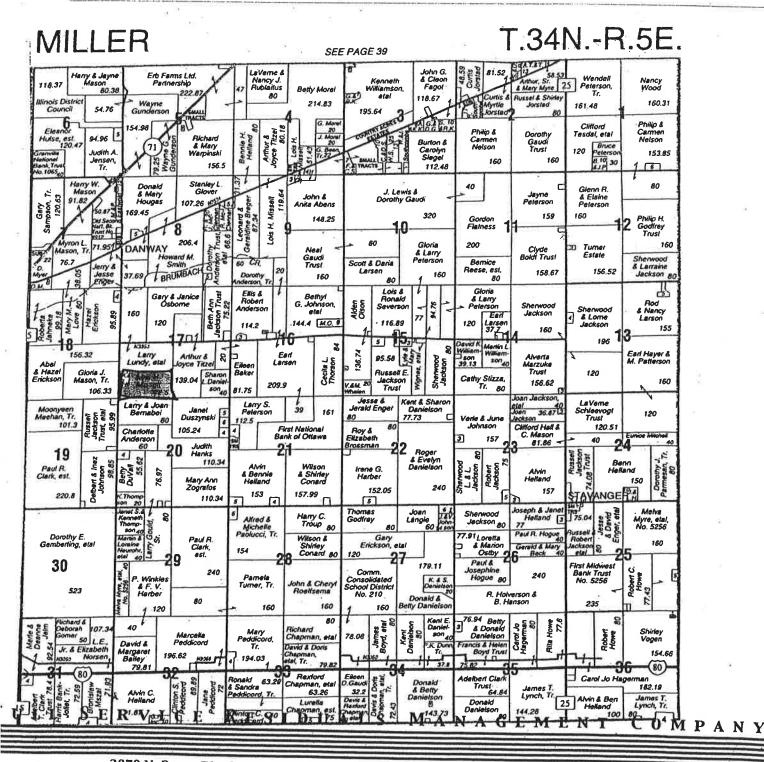






### PLAT MAP

Field – Firr 1 70 acres LaSalle County Miller Township Section 17



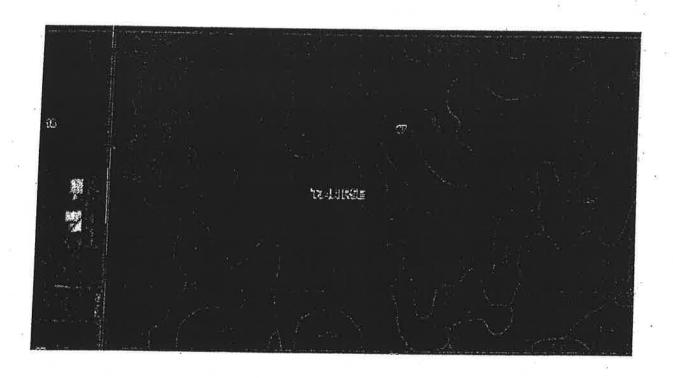


# Greg Firrantello non-responsive

# SOIL SERIES

Field – Firr 1 70 acres LaSalle County Miller Township Section 17

TEXTURE	% SLOPE	PERMEABILITY
SiL	2-4%	0.6-2.0 in/hr
SiL	4-6%	0.6-2.0 in/hr
SiCL ®	4-6%	0.6-2.0 in/hr
SiL	6-12%	0.6-2.0 in/hr
SiCL	0-2%	0.2-0.6 in/hr
SiC	0-2%	0.6-2.0 in/hr
SiCL	0-2%	0.2-0.6 in/hr
SiCL	0-2%	0.6-2.0 in/hr
	SiL SiL SiCL SiL SiCL SiCL SiC SiC	SiL       2-4%         SiL       4-6%         SiCL       4-6%         SiL       6-12%         SiCL       0-2%         SiC       0-2%         SiCL       0-2%



# ULL SERVICE RESIDUALS MANAGEMENT COMPANY



#### Plat Map



ULL

Field 1 48 acres LaSalle County Serena Township Section 32

T.35N -R.4E. WEST SERENA NORTH RUTLAND SLEI Frust 83.37 Shirle: (23) 57.33 . 55.03 of Offawa, No. 2151 Hoxsey Family, L.P. 124.27 2 28.38 139.26 S Man R Brighten F R 10 Hugh, Jr. & Judy Dully Larry & Sarah Nelson Joe & Patricia Frieders Gene & Barbara Buhler ESTATES William R. Brignon, Tr. 160 164.11 Hose-mary Walter 38.9 f William H. Marshall 79.72<sub>f</sub> 5 | 4 Joenn K. Fox First Midwest Bank Trust Ann Donderwille 80 No. 72-11490 238.41 160 John & Elizabeth Butterlield SEE PAGE 60 94.09 100.34 John & 82.81 Mergarel Dully Trust Shirley & Joanette 4 Kember, Tr. <sub>EV</sub> 7-M Limited 116.28 157.05 143.4 120.5 94 Jane Trumbo Stratton Kevin Schrader & K. Veliz 172.09 SEFENA 150 252.66 Judith Rosengre 196.89 Harriet Knudson Gary | Dolder, ata National Bank & Trust Co. Sycamore Cheryl J. Matteson 117.92 119.5 237.93 120 152.56 Sue E. Dolder 3 175.88 d'Ma P G2E18M E M



# SOIL SERIES

Bill Fox non-responsive

Field 1 48 acres LaSalle County Serena Township Section 32

SOIL SERIES	<u>TEXTURE</u>	% SLOPE	PERMEABILITY
Atterberry, 61A	SiL	0-2%	0.6-2.0 in/hr
Virgil, 104A	SiL	0-2%	0.6-2.0 in/hr
Batavia, 105B	SiL	2-5%	0.6-2.0 in/hr
St Charles, 243B	SiL	2-5%	0.6-2.0 in/hr
Greenbush, 675B	SiL	2-5%	0.6-2.0 in/hr



# ULL SERVICE RESIDUALS MANAGEMENT COMPANY



#### PLAT MAP

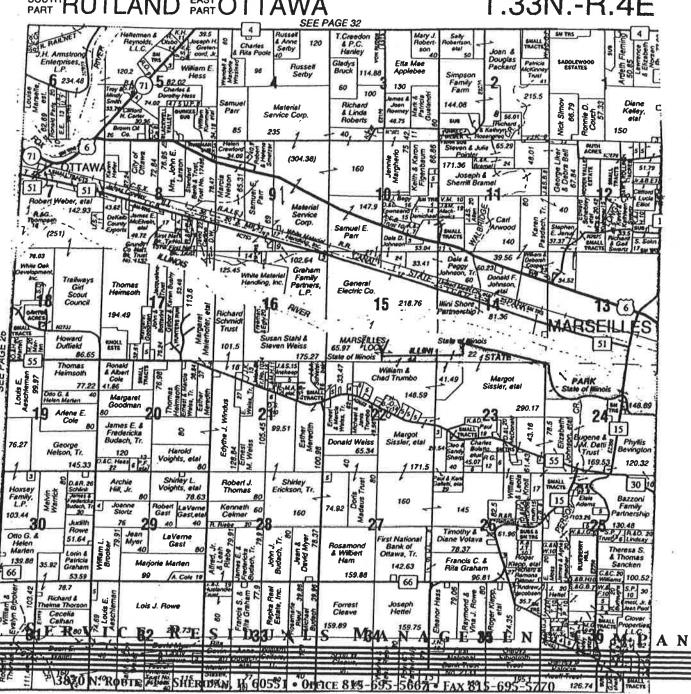


UL

Field 3 60 acres LaSalle County Fall River Township Section 33

# **FALL RIVER** SOUTH RUTLAND EAST OT TAWA

T.33N.-R.4E



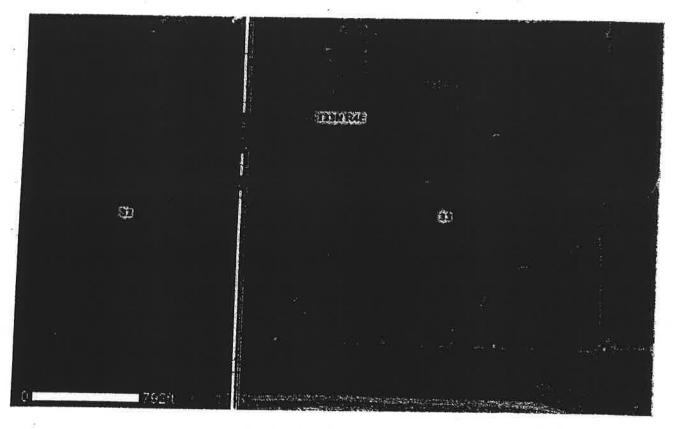


### **SOIL SERIES**

Bob Loftus non-responsive

Field 3 60 acres LaSalle County Fall River Township Section 33

SOIL SERIES	<b>TEXTURE</b>		% SLOPE	PERMEABILITY
Swygert, 91B	SiCL	8	2-4 %	0.2- 0.6 in/hr
Bryce, 235A	SiC		0-2 %	0.2-0.6 in/hr
Mokena, 295A	SiL		0-2 %	0.6-2.0 in/hr
Rutland, 375A	SiCL		0-2 %	0.6- 2.0 in/hr
Rutland, 375B	SiCL		2-5 %	0.6- 2.0 in/hr
Streator, 435A	SiCL		0-2 %	0.2-0.6 in/hr





# PLAT MAP



Field 4
120 acres
LaSalle County
Grand Rapids Township
Section 26

# **GRAND RAPIDS**

T.32N.-R.4E.

	SEE PA	AGE 27			
Robert & Lorraine William Brook	at June R. Schers, Tr. Hettel 44.54 164.58	Thomas House Bel.7 Bit Hess Bel.7 Bi		58.85 Tammy Everett Set Langas Hapner Set Langas 40 Lang	
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Walter W	Abort R. Early A. Charles A. Abort R. Early A. Charles	Raymond & Vine Rowe 235 s	Raymond & William & Norma Powe, Tr. & Dooley 118.08	Scott & Bo Bobra Robinson 12	
Curtis P. Mary & Ki	Weyne & Jeffrey Bo Weyne & Jeffrey Bo Weyne & Schottle Bo Weyne & Schottle Bo Weyne & Section Bo Weyne & Sec	Coher a Miray Charles Chern. T. T. Coher Charles Charles Charles Charles 160		Ruban S. Dilimer 74.55  Dilimer 74.55  John & Jean Amstrong & Bo. Bonn Edward & Edwa	
Laverne Dooley 113.91 8 9 1 186.	Tr Beity H. Wayne & Gleim, Tr. Jeffrey Schott Gleim, Tr. 240	H. Robert H. Robert Weier By Anna B. Weier By Anna B. Robert B. Ro	Petrole & Donald Fermer Sam & Frank Diss 40 Hober 40 Americans, state of the same of the s	Lawerne E. Dooley 13	
Halph & S. Bergman G. P. Bergman G. Gary G. Gary Schobert	aud A. La Vernie E. Dooley	Marie Loeffler  160  John & Jean* Amstrong 80  Rita Fenton Trust 79.59	1 James 4 85	William Geiger,	H 08
William Lehr, Tr. 0 160 80 20 20 Gary S	160 I. Irager 80 Jeffrey S. Art Irager 80 Jeffrey S. Art Mable I. Cole 9 Gleim 100 Roneld A. Cole 9 Jeffrey 40 70	dene Wittord Cole A. Cole 59.19 59.1	Marilyn do 80  USA Methods 13 Robart S & Chary Ourdan 40 23  E 23 E	24 Gery Wheelen	:
William Osman, est. 89.2 Use State of the Contract of the Cont	MCLachlan   1   1   1   1   1   1   1   1   1	Lucille Durden Sepand 200	And And And And And And And And And And	Edward M. R. Tr. 60 Czerkies Marcie A. Marshell 269.64 95.87	
Trager, etal Poundstone  134.2 30 158.37  Bonald McBride S Goorde Lucil  53.75  Bonald McBride S Goorde Goorde Hess S Goorde S Goorde Hess S Goorde	40 Marsha Schobert 4 Ne A. James 8 Sandra Burdan On 8 120 120 120	160 27 80 3	Stanley Robert Schnder Loftus Loftus Loftus Reymond & Loftus Reymond & Walter Scott & Berbarra Bernard D.	Mergaret G. Barickman Family Parinership	
Donothy Daire 80 160 E5 40	119 158.6 Rep 14975	Del Se Se L. Gould L. Gould 120	Colberg 40  Don Durden & Safy Bernard 60  Albert & 40  Eursice Durden	nust E W.E. & E.F. Monitz & O	2
Fam Tr. Fam Tr. Fam Tr. SER W4 6	160 160 3 Step Oundan Com	158 34 160	Wolfe, etal John Kuhn 5 Farm, Inc. 5	Czerkies Webb	MPANY
To the state of th	SVS. II. CO. ST. ST. ST. ST. ST. ST. ST. ST. ST. ST	8ince 815-695	-3007 FAX 815-69	100000000000000000000000000000000000000	

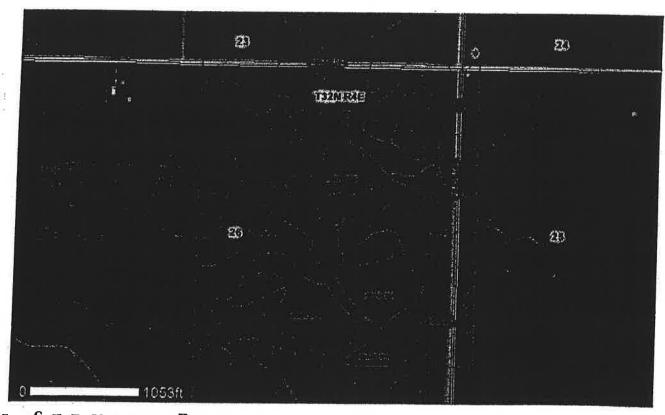


# **SOIL SERIES**

Bob Loftus non-responsive

Field 4
120 acres
LaSalle County
Grand Rapids Township
Section 26

SOIL SERIES Swygert, 91B Swygert, 91C3 Elliott, 146B Elliot, 146B2 Drummer, 152A Varna, 223C2 Varna, 223C3 Varna, 223D3	TEXTURE SiCL SiCL SiCL SiCL SiCL SiCL SiL SiCL SiC	% SLOPE 2-4 % 4-6 % 2-4 % 2-4 % 0-2 % 4-6 % 4-6 % 6-12 %	PERMEABILITY 0.2- 0.6 in/hr 0.2-0.6 in/hr 0.6-2.0 in/hr 0.6-2.0 in/hr 0.6-2.0 in/hr 0.6-2.0 in/hr 0.2-0.6 in/hr
•		4-6 %	0.2-0.6 in/hr
Varna, 223D3 Ashkum, 232A	SiCL SiCL	6-12 % 0-2 %	0.2-0.6 in/hr 0.2-0.6 in/hr
Bryce, 235A Mokena, 295A	SiC SiL	0-2 % 0-2 %	0.2-0.6 in/hr 0.6-2.0 in/hr



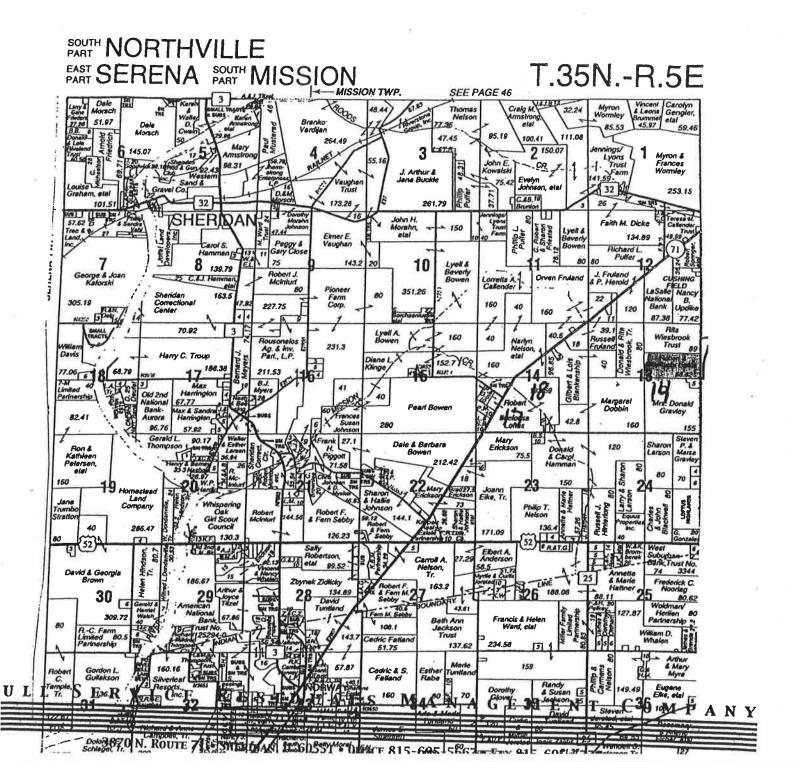
FULL SERVICE RESIDUALS MANAGEMENT COMPANY



## Plat Map



Field 14 40 acres Kendall County Big Grove Township Section 13





# **SOIL SERIES**

Bob Loftus non-responsive

Field 14 40 acres Kendall County Big Grove Township Section 13

SOIL SERIES	<b>TEXTURE</b>	% SLOPE	PERMEABILITY
Swygert, 91A	SiCL	0-2 %	0.2- 0.6 in/hr
Swygert, 91B	SiCL	2-4 %	0.2- 0.6 in/hr
Rutland, 375A	SiCL	0-2 %	0.6- 2.0 in/hr
Rutland, 375B	SiCL	2-5 %	0.6- 2.0 in/hr

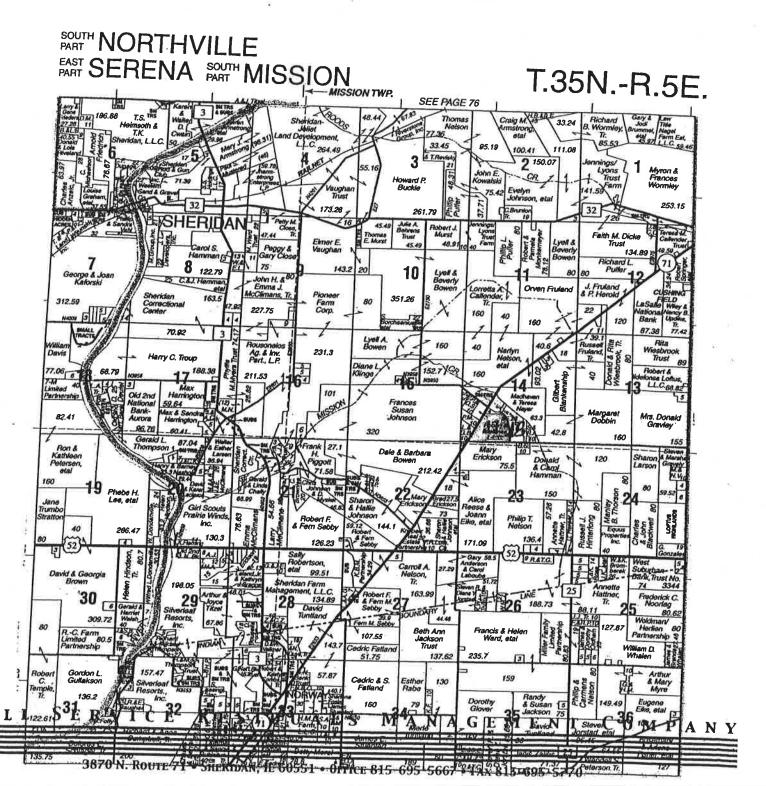




#### Plat Map



Field 17 60 acres LaSalle County Mission Township Section 14





# SOIL SERIES

Bob Loftus non-responsive

Field 17 60 acres LaSalle County Mission Township Section 14

SOIL SERIES	<u>TEXTURE</u>	% SLOPE	PERMEABILITY
Rutland, 375B	SiCL	2-5%	0.6-2.0 in/hr
Mona, 448C2	SiL	5-10%	0.6-2.0 in/hr
Blackberry, 679B	SiL	2-5%	0.6-2.0 in/hr



# ULL SERVICE RESIDUALS MANAGEMENT COMPANY



# PLAT MAP

Bob Loftus non-responsive

Field 19
23 acres
Kendall County
Big Grove Township
Section 6

BIG GROVE	Lofty 19 SEE PAGE 15 FOX TWP.	T.35NR.6E.	
Floyd Nagel, State Bank State Ban	ADDOR 70 20 80 80 156 156 156 156 156 156 156 156 156 156	Florence Thompson Trust  232  William Weeks, etal  96.82  Lawrence E. Weeks, etal  7(3)  Section 100  Milliam Margaret 4 Codel 8  Kittelson Trust 153.9  4 no	
Sylvan Donate Truet State Sylvan Son State	S   S   Mark &   S   S   S   Mark &   S   S   S   S   S   S   S   S   S	Alarion R. Joseph S. Joseph Anderson, est. 136.73 S. Joseph Anderson, est. 160 July	
June Class Control of	Se P. & Bornie & J.K. mester & 13  L. Verbarg abouton from 15  L. Verbarg abouton from 15  148.27	Wayne & S. Carlotte March 1975 (1975)	
Lkoyd Vogen  8.3.2  8.3	A Lawyer Bright Trust 70.11 Mag 17 Trust 70.11 Mag	A Agres & September 160 A Agres Pale Lines A Agres Pale Lines A Agres Pale Lines A Agres Pale Lines A Agres Pale Lines A Agres Pale Lines A Agres Pale Lines A Agres Pale Lines A Agres Pale Lines A Agres Pale Lines A Agres Pale Lines A Agres Pale Lines A Agres Pale Lines A Agres Pale Lines Agree	
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National Bank, Trust No. 9366  National Bank Trust No. 9366  159.42  159.42  TAM  John E. &	Geraldine L Stemmen 183.45 no Chifford W.	Second Se	
Martha Hiller, etal  Transcript  R.E. & R.B. Fannell Harriet  R.E. & R.B. Francell Harriet  R.E.	Thomas A. Fietcher, est.  134.3  BOUNDARY Prairie Bank  Marin W.  Green Trust  Marine Company	See See See See See See See See See See	
Samul.   139.19   139.19   139.19   139.19   139.19   112.59   1	Betry Knsotta   Trust No. 1   Scott N.   Scott N.   Scott N.   Zudema   F.	John Scell Estate 295.58 May R Oben 555 Frights of 42.11 14 295.58 May R Oben 555 Frights of 42.11 14 Paricle M B	
Moc Trust 140 Thomas A Flatcher 80 - 128TW 13 M 80 - 128TW 13 M 80 - 128TW 13 M 80 THOMAS A Flatcher 80 Thomas A Flatcher 80 Thomas A Flatcher 80 Thomas A Flatcher 140 Thomas A	80 28 100 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	176.57 26 S H. & Alker LISBON 176.57 26 S LISBON 176.57 26 S LISBON 176.57 25 S Anderson 176.	
133.8 151   Myre   National Bank, Trust No. 1284   154.46	72.61\ 6 7 160   S   S   S   S   S   S   S   S   S	Normal 148   148   18   18   18   18   18   18	
LI SPRVIGE R	E-S 138 4 A A	tym a 1	ANY
133 3870 N. ROUTE 71 • S	ERIDAN, H 1815 31 • OFF 18 81 5 698 5 162	27 Feb 15-695-5770	



# SOIL SERIES

Bob Loftus non-responsive

Field 19 23 acres Kendall County Big Grove Township Section 6

SOIL SERIES	<u>TEXTURE</u>	% SLOPE	PERMEABILITY
Saybrook, 145B	SIL	2-5 %	0.6-2.0 in/hr
Proctor, 148A	SIL	0-2 %	0.6-2.0 in/hr
Brenton, 149A	SIL	0-2 %	0.6-2.0 in/hr
Drummer, 152A	SICL	0-2 %	0.6-2.0 in/hr

